DOCUMENT RESUME

ED 044 083 HE 001 804

AUTHOR	Pearson, Richard
TITLE	The Opening Door. A Review of New York State's Programs of Financial Aid for College Students.
INSTITUTION	College Entrance Examination Board, New York, N.Y.
PUB DATE	67
NOTE	96p.
AVAILABLE FROM	Bureau of Publications, State Education Department, Albany, New York 12224
EDRS PRICE	EDRS Price MF-$0.50 HC-$4.90
DESCRIPTORS	College Attendance, College Bound Students, College Students, Disadvantaged Youth, *Educational Finance, Federal Programs, *Financial Support, *Higher Education, Scholarships, *State Aid, *State Programs
IDENTIFIERS	*New York

ABSTRACT

This study explores the relationship between access to higher education and the operation of New York State's programs of student financial aid. The first section presents a summary of the major trends affecting access to higher education. These trends include: increasing manpower needs; increasing college attendance not only of intellectually able students, but also of those less intellectually gifted; growing recognition of the basic right to education for all regardless of income; change and diversification of higher education institutions; and trends in consumer expenditures for higher education. The second section examines aspects of the current New York scene: the state's programs of financial aid, changing patterns of college attendance, the increase in graduate study, the development of 2-year colleges, the Regents College Scholarship Program: the examination, the selection of students to receive the awards, and the procedures for relating the size of the award to family ability to pay, the Scholar Incentive Program geared to college capable students, the students not graduating from high school, institutional considerations and student financial aid, and the relationship between state and federal aid programs. The final section of the report is devoted to conclusions and recommendations. (AF)

ED0 44083

The Opening Door

A Review of New York State's Programs of Financial Aid for College Students

Richard Pearson

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

HE001804

College Entrance Examination Board, New York, 1967

Foreword

Dr. James E. Allen Jr.
Commissioner of Education
The University of the State of New York
The State Education Department
Albany, New York 12224

Dear Dr. Allen:

I am pleased to present in this report the results of the study that the College Entrance Examination Board was invited to undertake by the Board of Regents of the State of New York last spring. The study staff, the consultants, and the advisory committee first reviewed with me the New York State program of financial assistance to college students. We then addressed ourselves to the task of formulating recommendations with respect to the role, scope, and features of such a program in the years ahead. We transmit them in this proposal with a feeling of admiration for what New York State has already accomplished and with the hope that the results of our work will aid the state in continuing to improve its services to the young students to whom it will turn for leadership tomorrow.

The individuals associated with this study join me in thanking you and the Board of Regents for this opportunity to serve in the interest of improving access to higher education in New York State.

Cordially yours,

Richard Pearson

Contents

Staff, Consultants, and Advisory Committee for the Study . . . vii

Origin, Purpose, and Method of the Study 1

A Background Summary of the Major Trends Affecting Access to Higher Education 5
  Overall Enrollment Trends 5
  Manpower Trends in the Nation's Economy 6
  Intellectually Able Students 8
  College-capable Students 10
  The Nonstudent and the Right to Education 12
  Institutional Trends 16
  Trends in Consumer Expenditures for Higher Education . . . 19
  Conclusion 29

Aspects of the Current New York Scene 31
  New York State's Programs of Financial Aid to College Students 31
    Regents College Scholarship Program 31
    Other Competitive Scholarship and Fellowship Programs . . 34
    Characteristics of the Competitive Programs 34
    Scholar Incentive Program 39
    Conclusion 40
  Changing Patterns of College Attendance in New York 40
    Overall Enrollment Trends 40
  Increasing Graduate Study 41
    Development of the Two-year Colleges 43
    Part-time College Study 44
    In-state and Out-of-state Migration 45
  Intellectually Able Students and the Regents College Scholarship Program 47
    The Regents Scholarship Examination 47
    Selection of Students to Receive Regents Scholarships 52
  Regents Scholarship Stipends and Family Ability to Pay 54
    Summary Evaluation of the Regents College Scholarship Program 58

College-capable Students and the Scholar Incentive Program . . 60
Nonstudents and Their Potential 63
Institutional Considerations 64
Relationship between State and Federal Aid Programs 72

Conclusions and Recommendations 76

Notes and References 88

Staff, Consultants, and Advisory Committee for the Study

Staff

Richard Pearson, President, College Entrance Examination Board, *Study Director*

John J. O'Hearne, Assistant Director, Southwestern Regional Office, College Entrance Examination Board, *Associate Study Director*

Inge Lederer Gibel, Editorial Associate, College Entrance Examination Board, *Administrative Assistant to the Study*

Consultants

Ernest Boyer, Executive Dean University-wide Activities, State University of New York

Charles C. Cole Jr., Dean of the College, Lafayette College

George L. Dischinger Jr., Director of Admissions, The University of Rochester

Alex J. Ducanis, Director of Institutional Research, State University of New York at Binghamton

Warren G. Findley, Director, Research and Development Center in Educational Stimulation, University of Georgia

John I. Kirkpatrick, Financial Vice President and Treasurer, Pace College

George A. Kramer, Director of Admissions, Rutgers–The State University

Jerome Lord, Executive Assistant to the Dean for Academic Development, The City University of New York

Martin Meade, Vice President of Student Personnel, Fordham University

James R. Spence, Director, Office of Admissions Program, State University of New York

Advisory Committee

Lloyd S. Michael, Superintendent, Evanston (Ill.) Township High School, *Chairman*

John F. Morse, Director, Council on Federal Relations, American Council on Education, *Vice-Chairman*

George W. Angell, President, State University College at Plattsburgh

Robert Birnbaum, Assistant to the Chancellor, The City University of New York

Ernest Boyer, Executive Dean University-wide Activities, State University of New York

Anna Burrell, Professor, State University College at Buffalo

George L. Dischinger Jr., Director of Admissions, The University of Rochester

Otis E. Finley Jr., Executive Director of ACTION, A Better Community, Inc., Rochester

Arnold Goren, Dean of Admissions and Professor of Education, New York University

James Jones, Professor, Graduate School of Social Work, New York University

Very Reverend Charles J. Lavery, President, St. John Fisher College

Clifford Lee Lord, President, Hofstra University

Arthur S. Marmaduke, Executive Director, California State Scholarship Commission

Mother Elizabeth J. McCormack, President, Manhattanville College of the Sacred Heart

Reverend Laurence J. McGinley, Vice President, St. Peter's College

Morris Meister, New York City

Hans Rosenhaupt, National Director, Woodrow Wilson National Fellowship Foundation

Daniel Schreiber, District Superintendent, New York City Board of Education

John M. Stalnaker, President, National Merit Scholarship Corporation

David B. Truman, Dean, Columbia College

Walter H. Wolff, Principal, John Bowne High School (Flushing, N.Y.)

Origin, Purpose, and Method of the Study

This study is concerned with an exploration of the relationship between access to higher education and the operation of New York's programs of student financial aid. The basic philosophical position of those who undertook this study is a simple one. The state of New York is well launched on a long-term and necessary trend: open access to higher education on the part of the great majority of its young people. The state's student financial aid programs constitute an instrument of public policy that can contribute to sustain and advance this trend. The questions with which the study is concerned deal with the possible changes and extensions in the present programs that, in the light of today's circumstances, are relevant to current restraints on access to higher education within the state of New York.

In April 1966, the College Entrance Examination Board was invited by the Commissioner of Education of New York to submit a proposal for such a study. The invitation was brief and to the point. It invited an overall review, with recommendations, to be conducted and completed within six months, in time for the possible preparation of proposals to the Regents and the legislature in early 1967. Neither the commissioner nor his colleagues had any particular point of view to espouse, and they have offered no specific direction to any part of the study. They have, however, been readily available to the study staff and its consultants and to meetings of its advisory committee. Their information and their advice have been invaluable.

Presumably, the College Board was identified to receive this invitation because of its membership affiliation with higher institutions and secondary schools throughout the state, as well as elsewhere throughout the country. Presumably also, the Board's long experience with the identification and nurture of intellectually able students and its more recent, intensive experience with student financial aid problems through the College Scholarship Service were considerations that led to the invitation. At any event, these factors were decisive in the minds of the Board's officers and prompted them to prepare and submit a proposal. This decision was subsequently reported to the trustees of the Board, who agreed wholeheartedly with the undertaking. The study was funded under the provisions of Title V of the Elementary and Secondary Education Act of 1965.

The brief time schedule allotted to the study determined the general nature of the approach and also posed serious limitations on what could be done.

The general approach was to "posthole" certain aspects of the overall program, rather than to undertake a comprehensive evaluation of all elements. Six topics were selected for intensive investigation by a series of consultants whose training and experience were highly relevant. The topics and the consultants who investigated them are as follows.

Implications of Changing Patterns of College Attendance. James R. Spence, Director, Office of Admissions Program, State University of New York

Selection of Able Students in the Regents College Scholarship Program. George A. Kramer, Director of Admissions, Rutgers–The State University, and Member, New Jersey State Scholarship Commission

The Regents Scholarship Examination. Warren G. Findley, Director, Research and Development Center in Educational Stimulation, University of Georgia

The Assessment of Financial Ability to Pay the Expenses of College Attendance with Particular Reference to Students from Low-income Families. Martin Meade, Vice President of Student Personnel, Fordham University

The Relationship between Federal and New York State Financial Aid Programs. Charles C. Cole Jr., Dean of the College, Lafayette College

Legislative, Administrative, and Financial Implications. John I. Kirkpatrick, Financial Vice President and Treasurer, Pace College

It should be a matter of record that the consultants listed above were the first choice of the study staff in each instance and that each agreed readily to undertake the investigation, despite already existing commitments in their own work. Their contributions represent a considerable sacrifice of time and energy, on unusually short notice.

Subsequently, it became clear that the implications of the existing programs, and those of any contemplated changes, for the colleges and universities in the state, should also be the subject of individual inquiry. Three such inquiries were commissioned: for the private colleges and universities; for the State University of New York; and for the City University of New York. The consultants were George L. Dischinger Jr., Director of Admissions, University of Rochester; Ernest Boyer, Executive Dean University-wide Activities, State University of New York; and Jerome Lord, Executive Assistant to the Dean for Academic Development, City University of New York.

The major limitation posed by the six-month time schedule was that the consultants and the study staff were obliged to limit their attention to statistics and other data that were readily available. There was no opportunity for original research and little for the undertaking of needed surveys and tabulations. For this reason, this report relies heavily on general evidence and on reasoning to illuminate the basic issues; it offers relatively little to precise formulations of particular problems or detailed consideration of possible solutions.

Alex J. Ducanis served as an overall statistical and research consultant to the study. Ducanis is currently Director of Institutional Research at the State University of New York at Binghamton and formerly served in a research capacity in the State Education Department at Albany. He prepared summaries of basic and historical statistics for use by the other consultants and the study staff. He also made arrangements for a special New York tabulation of the 1960 Project Talent Study, a tabulation that was barely completed in time for consideration in this report.

An important part of the study staff's *modus operandi* was the use of a large and broadly representative advisory committee, drawn from within and without the state of New York. The committee chairman was Lloyd S. Michael, Superintendent of the Evanston Township High School in Illinois and currently Chairman of the Illinois State Scholarship Commission. Michael has previously served as a high school principal in two communities in New York State. The vice chairman of the advisory committee was John F. Morse, Director, Council on Federal Relations of the American Council on Education. Morse is also well acquainted with New York's educational problems, having served as Vice President and Director of Admissions at Rensselaer Polytechnic Institute. The names of other members of the advisory committee are given at the beginning of this report.

The advisory committee met three times during the course of the study: once on July 7, 1966, to consider purposes and plans; once again on September 16 to consider progress reports from the study staff and consultants; and for a two-day final meeting on November 4 and 5 to discuss general conclusions and recommendations.

The advisory committee made two important contributions. First, it insisted on taking a broad, long-range view of problems of access to higher education within the state and on the role that might be played by the financial aid programs. The comprehensive perspective that has been taken in this report was fully as much the result of the committee's discussions as it was the result of any predilections on the part of the director of the study. Second, the committee insisted on taking a student-oriented view of the problems under consideration. Institutional problems were recognized and discussed as they arose but were, invariably, subordinated to a more general concern for the young people themselves.

The member colleges, universities, secondary schools, and associations of the College Entrance Examination Board do not necessarily endorse the conclusions and recommendations of this study. The study staff used procedures that the membership of the Board itself uses in considering problems of access to higher education in the United States: factual evidence and informed discussion by representative bodies. To that extent, the experience acquired by the Board's member institutions and associations was drawn upon for purposes of this study. The contents of this report, however, are the responsibility of the director of this study who happens also to be the chief executive officer of the Board.

A Background Summary of the Major Trends Affecting Access to Higher Education

New York State's programs of financial aid to college students are the largest and most extensive of their kind in the country. They have had and will continue to have significant influence on the large-scale movement of young people into the various institutions of higher education, both in the state and nationally. This review thus starts with a summary of the trends affecting admission to college, in the belief that New York's financial aid programs are an instrument of public policy that can influence the size and the shape of the future college-going population.

The growing movement of American youth into an increasing variety of educational programs beyond high school has its roots in the nineteenth century when widespread opportunity for elementary education became a fact in the United States. It was stimulated after World War I and during the Depression by the development of the comprehensive secondary school. It was further stimulated after World War II by the national realization that colleges and universities offered a useful means of returning large numbers of veterans to the civilian economy and to peaceful pursuits. The movement has since been stimulated by an advancing technological economy and, most recently, by an emerging social concern for each boy and girl in coming generations. The door to educational opportunity beyond high school is now about half open. Actions taken during the next few years will largely determine whether and how soon the door will be fully open to all the nation's young people.

Overall Enrollment Trends

The extent and pace of the movement into higher education is suggested by national figures on college enrollments. In 1900, there were 0.2 million students in the colleges and universities, a number that amounted to 4 percent of the 18-21 age group. By 1955 and 1960, enrollments reached 2.7 and 3.6 million, respectively. In 1965, there were 5.6 million students in the colleges and universities, a number that amounted to more than 45 percent of the age group. Nationally, beginning college students in 1964 equaled 54 percent of high school graduates that year.

Within the state of New York, college enrollments reached 321,000 by 1950. In 1955 and 1960, the figures were 325,000 and 419,000, respectively. In 1965, there were 611,000 students enrolled in the colleges and universities of the state, of whom almost half were studying part time. The total 1965 enrollment amounted to a substantial 60 percent of the age group. New York's beginning college students in 1964 equaled 54 percent of high school graduates that year.

Groups this large, either within the state or over the entire country, mask a great many individual differences among boys and girls. In this study reference is made to several large groups of young people. The particular definition of an age group varies depending on the context of the discussion. The reference may be to 18-year-olds, or to the group aged 18-21, or to younger groups. Within a given age group, distinction is made between high school graduates and nonstudents, the latter being boys and girls who dropped out of school at some time before they would normally have graduated from high school. In references to high school graduates, distinction is made between intellectually able students and students who are capable of doing college-level work. The size of the intellectually able group is not known with even a reasonable degree of precision, but it is becoming apparent that the group is potentially larger than most current estimates. For reasons that are developed as this discussion proceeds, the intellectually able group is defined here as constituting roughly 25 percent of high school graduates, roughly 20 percent of the 18-year-old age group, and potentially 25 percent of younger age groups. The college-capable group is rapidly being defined by mere graduation from high school. This group thus includes the intellectually able and a larger number of other young people, so that the entire college-capable group is taken to be from 80 to 85 percent of high school graduates.

Manpower Trends in the Nation's Economy

Much of the increase in college enrollments is the result of expanding manpower needs in the American economy. Colleges and universities, throughout the twentieth century, have prepared men and women for professional employment. In the early decades, the focus was on the senior professions: medicine, law, public service. Later, newer professions were added: engineering, business, science, education. In the post-World War II period there was a marked acceleration in manpower requirements, one that took two distinct forms.

On the one hand, the various professional fields were subjected to increasing pressures for specialization. These pressures were particularly great in the sciences and technology, where such fields as nuclear physics, nuclear chemistry, biochemistry, and space technology gained increasing significance. Specialization increased in other fields too, however. The effect of growing specialization in all the professional fields has been to increase greatly the demand for intellectually able students, who can complete rigorous undergraduate programs, proceed into graduate and professional schools, and then enter employment.

On the other hand, strong manpower pressures now exist for a growing variety of newer subprofessional and technical occupations, such as nursing, medical technology, electronics, accounting, and retail merchandising. Some of these fields require four years of college work, others only two. They usually do not require training at the graduate and professional level. The effect of increased manpower pressures for subprofessional and technical workers has been to increase the demand for young people who are capable of pursuing a two- or four-year college program but do not feel the commitment required for a fully professional program. Some of these college-capable students will take liberal arts programs, together with vocational subjects, at a four-year institution. To an increasing extent, they are enrolling in two-year community colleges, as either transfer or terminal students.

It is important to emphasize that the economic demand for college-capable students to pursue subprofessional and technical programs is, in quantitative terms, more significant than the demand for intellectually able students. One fully trained professional requires anywhere from 5 to 20 subprofessionals to support his work. The logistics of an advancing, technological economy are now bearing heavily on the full range of ability in the general population.

From the point of view of the economy, and its manpower needs, investment in the education and training of future workers can be expected to produce substantial dividends in the form of future economic growth and increased productivity. The research and policy committee of the Committee for Economic Development has stated that "It seems a reasonable conclusion from presently available evidence that the returns from educational expenditures are not only positive but also probably of at least the same order of magnitude as the returns from other investments made in the United States, both in individual earnings and in national income. By this elementary standard, education seems to pay."[1]

Intellectually Able Students

The admission to college of a substantial proportion of young people who have high intellectual ability is one of the significant advances in education between 1950 and 1965. In 1950, the odds were about fifty-fifty that such students would enter college directly from high school. By 1960, these odds had shifted to about eighty-twenty in favor of college attendance and are probably somewhat higher today.

The reasons for this significant shift are complex and not too well understood, but at least four stand out as important.

First, there was a marked change in public attitude toward education and toward intellectually able students, as a result of Sputnik I. We became aware as a nation that we had to be more attentive to the nurture of the intellectually able students in the schools and colleges.

Second, there were movements within education that led to the now-familiar wave of curricular reform in the schools. These movements were under way before Sputnik I, but they were given substantial impetus and support by that event and by the public reaction to it.

Third, the expansion of physical facilities for higher education began early in the 1950s, as a result of enrollment pressures from returning veterans and as future population trends became visible.

Fourth, student financial aid funds of all kinds were substantially increased. Many new scholarship and loan programs came into being during the 1950s, and programs already in existence were enlarged. This change came about initially as a result of actions in the private sector:

some colleges and universities and a few private agencies. The substantial momentum came, however, as a result of subsequent actions by a number of states and by the federal government. The state of New York contributed to this trend through its substantial expansion of the Regents College Scholarship Program and through the creation of the Scholar Incentive Awards.

The curricular reforms of the 1950s had a discernible impact on college preparatory programs in the secondary schools. The impact has probably been greatest in the case of mathematics, science, and perhaps foreign languages, but it has also been evident in the case of English, history, and social studies. Curricular reform has been accompanied by a substantial extension of the guidance function in the secondary schools, to give increasing support to young people in their planning for college beginning in the ninth and tenth grades.

It is likely that the improvement that has occurred with respect to college attendance of intellectually able students is the result of all the foregoing factors rather than any one alone. It is also likely that curricular reform and the extension of the guidance function in the schools were necessary prerequisites to the overall improvement. It is not at all likely that the mere increase in funds available for student financial aid would have had an important effect without these other prerequisite changes. Experience with intellectually able students during the 1950s and early 1960s suggests that financial aid programs serve largely to implement decisions already reached by young people well before the twelfth grade.

There is another implication growing out of recent experience with intellectually able students. It is apparent that curricular reform and extension of the guidance function have not affected all secondary schools equally. For the most part, schools that had strong programs in the early 1950s are the ones that have shown the greatest gains in the intervening period. These schools probably number no more than 1,000 throughout the country, out of an overall total of some 25,000. The greatest gains were made in schools that are characterized by high per-pupil costs, favorable teacher-pupil ratios, well-qualified faculties, and adequate physical facilities. These schools are usually located in the suburban areas and rarely in urban centers or rural areas. The intellectually able students admitted to college during the past 15 years have come very largely from schools like these, not from a full cross section of the country's schools.

There are, thus, two conclusions from this experience that are relevant to the present study. First, financial barriers to college attendance have been lowered for a substantial proportion of the intellectually able students. Within a narrow range, say the top 5 percent of high school graduates, they have been effectively eliminated. Within a broader range, say the top 25 percent of high school graduates, they have been substantially reduced. Second, this experience has shown that a comprehensive effort that includes increased financial aid can result in dramatic shifts in college attendance for *some* young people in the schools they are fortunate enough to attend. Experience has revealed relatively little about the number and the nurture of the intellectually able among *all* young people in *all* the schools.

College-capable Students

The period between 1950 and 1965 produced a second significant advance: young people whose ability and high school performance were well below that of intellectually able students began to attend college in substantial numbers. A generation ago, most of these boys and girls would have gone directly into employment after high school graduation. Today, an increasing proportion are continuing their education through two and sometimes four years of college study. The trend is in the direction of considering all students who succeed in graduating from high school as capable of doing college work.

The nature of this trend is suggested by evidence from the Project Talent survey, conducted nationally among high school students in 1960. The results showed that "5% of the students who entered college scored in the bottom one-fifth of the aptitude distribution, and as many as 21% scored in the bottom half."[2] These findings are confirmed by a 1965 survey conducted by Medsker and Trent. In that case, 22 percent of the students scoring in the bottom fifth of the aptitude distribution entered college, and 31 percent of those scoring in the next lowest fifth entered college.[3]

The evidence is clear that these college-capable students were not admitted to college only to fail in their academic work. The persistence rate through one year of college study for the Project Talent students scoring in the bottom quarter was 72 percent. Persistence rates for the two groups cited above from the Medsker-Trent study were 65 and 78 percent respectively.

The reasons for increased college attendance on the part of the group here called college-capable are somewhat different from those advanced above for intellectually able students. Curricular reform and the extension of the guidance function were probably not direct causes, although they undoubtedly had an indirect influence; these changes, as discussed above, were focused largely on the intellectually able students in relatively few of the country's secondary schools. The more recent efforts in curriculum and guidance associated with disadvantaged students got under way too recently to be discernible in current statistics. Similarly, increases in student financial aid funds have probably had only an indirect effect on the number of college-capable students attending college. Few of these students can qualify for available scholarships, although loans for college expenses are available to many of them.

The principal explanation probably lies in the interplay among manpower requirements, public attitudes, and the availability of college programs at the subprofessional and technical level. There is a growing public awareness that employment during the latter third of the twentieth century will require some formal education beyond secondary school. This is a generally accurate reading of future manpower requirements in the country's advancing, technological economy. These expectations and requirements are being met in some areas of the country by the establishment of community colleges and by a broadening of the programs in many of the four-year institutions. The evidence is clear on one point: in localities where low-cost, comprehensive college facilities exist, college attendance rates run 80 percent or more of high school graduates; in areas where facilities are limited and expensive, college attendance rates run as low as 20 or 30 percent.

The appearance of substantial numbers of college-capable students in the college-going population poses two problems that are relevant in this study.

In the first place, there is a demonstrable social inequity between the college-capable students who do go to college and those who do not. At the highest levels of intellectual ability, financial barriers to college attendance have been eliminated; at somewhat lower levels, they have been substantially reduced. Elsewhere in the ability range of high school graduates, financial barriers are significant and in some cases crucial. Medsker and Trent summarize their evidence on this point as follows: "more students of low ability from high socio-economic homes entered college than did high ability students from low socio-economic homes."[4]

In the second place, there is danger of placing too much emphasis on traditional educational yardsticks in estimating what college-capable students are, in fact, capable of doing in college. The traditional yardsticks place heavy emphasis on intellectual ability because this has been the traditional emphasis in higher education. The newer college programs that are oriented toward subprofessional and technical occupations place less emphasis on intellectual ability and more on ability of a practical sort. All too little is now known about the abilities required in many of the new college programs. But there is growing evidence that traditional yardsticks, such as grades in college preparatory subjects or scores on conventional tests of scholastic aptitude and achievement (including the Regents College Scholarship Examination), are relatively less effective with these students.

The Nonstudent and the Right to Education

Opportunity for higher education today has touched, though not yet reached, young people from the lowest income groups in American society. To a degree, this is an economic problem, and further investment in opportunities at this level can be justified in terms of future economic return. The civil rights movement, however, has raised the issue to a moral plane. There is now a human right involved in educational opportunity, and the country is challenged to make real its dream of equal opportunity. The nonstudents who do not now graduate from high school, much less attend college, are thus a significant part of this overview of long-term trends toward access to higher education.

The present situation with respect to nonstudents is grim, as judged by findings from current studies. Many nonstudents today are Negro or members of other minority groups. These young people have been the subject of a large-scale survey recently completed by the United States Office of Education and reported under the title "Equality of Educational Opportunity." This survey reveals that only 4.6 percent of all college students in 1965 were Negro. Further, the Negroes who are in college are not attending a cross section of American colleges and universities. The survey reports "(1) in every region Negro students are more likely to enter the State College system than the State University system, and further they are a smaller proportion of the student body of universities than any other category of public institutions of higher education, (2) Negro students are more frequently found in institutions which have a high dropout rate, (3) they attend mainly institutions with low tuition cost, (4) they tend to major in engineering, agriculture, education, social work, and social science, and nursing."[5]

An important reason why Negroes are not entering higher education in reasonable numbers is that their abilities on the average are not as well developed by the twelfth grade as is the case with students among the white majority. The U. S. Office of Education survey reports nationwide median test scores at the twelfth grade for the two groups. The tests covered verbal, reading, mathematics, general information, and nonverbal questions. Median scores for the Negro students ranged from 40.6 to 42.2. For students in the white majority, medians ranged from 51.8 to 52.2. It should be emphasized that these differences are average differences and that some Negroes scored higher than many in the majority group. Nonetheless, the average differences are highly significant, both statistically and educationally.

A further conclusion from the Office of Education survey is even more sobering. The differences that were observed between the two groups at the twelfth grade were relatively greater than those observed between comparable groups at the first grade, or the beginning of formal education. The survey reports this conclusion in the following words. "For most minority groups, then, and most particularly the Negro, schools provide no opportunity at all for them to overcome this initial deficiency; in fact, they fall farther behind the white majority in the development of several skills which are critical to making a living and participating fully in modern society. Whatever may be the combination of non-school factors—poverty, community attitudes, low educational level of parents—which put minority children at a disadvantage in verbal and nonverbal skills when they enter the first grade, the fact is that the schools have not overcome it."[6]

The beginning of a serious attack on this problem, through programs of compensatory education for disadvantaged students, occurred about 10 years ago. An early example was the Demonstration Guidance Project in New York City, since known as the Higher Horizons Program. The state of New York and its towns and cities have been in the forefront of this attack through Project Able, Project Talent Search, the School to Employment Program, and Project Re-entry, in addition to numerous local efforts. Most recently, the federal government has given national impetus to a solution of the problem through Projects Head Start and Upward Bound. According to evidence reported in 1966 by Gordon and Wilkerson, compensatory programs are now under way in a minimum of 200 communities throughout the country.[7]

The problem of cultural deprivation, however, is stubborn, deep-seated, and goes to the roots of what educators know and do not know about the learning process. Most current programs in compensatory education are not yet showing the results that were hoped for. Gordon and Wilkerson summarize their judgment of current efforts under way throughout the country in the following words. "We have said to these children, 'We will prepare you for our school system, we will help you to catch up when you fall behind, we will show you the kind of lives other kinds of children already know about, and if you get discouraged and drop out we will try our best to get you back.' But what we have not said is, 'We will take you as you are, and ourselves assume the burden of finding educational techniques appropriate to your needs.' We have asked of them a degree of change far greater than any that we as educators have been willing to make in our own institutions."[8]

These judgments suggest that the curricular reforms and improvements in guidance that affected intellectually able students during the 1950s were child's play compared to the effort that will be required if the potential of the nonstudents is to be realized. The strategy of devising special projects and grafting them onto the schools' continuing programs worked well in the earlier case. There was, within a decade, substantial evidence of improvement in the rate of college attendance among intellectually able students and in their preparation, especially in science and mathematics. The problem with respect to the nonstudent, however, goes directly to the heart of educational philosophy and practice in the schools and may not be greatly influenced by special projects when the schools' basic programs continue unchanged.

In considering the changes required deep within the schools, Gordon and Wilkerson have written as follows. "Probably the most significant change—or at least the one with the most serious implications for education—will be the change that requires the schools to shift away from an emphasis on simply rewarding the successful student. The emphasis will have to fall instead on the schools' responsibility for insuring success in academic, emotional, and social learning for all students save a very few who are truly mentally defective."[9]

The direction of the required changes is suggested by another quotation from Gordon and Wilkerson. "It is essential that we begin to identify as assets those behaviors and conditions which can be utilized and built upon for the purposes of educational improvement. It is extremely important to recognize that selective motivation, creativity, and proficiency are present in this population, and, as Riessman has consistently stressed, if we look for these characteristics in their traditional form and along traditionally academic dimensions, we shall merely insure that they not be found. These children, like others, *are* motivated by *some* factors. They show creativity in *some* situations. They are proficient at *some* tasks and under *some* conditions."[10]

The future of the nonstudents in American schools during the next one or two decades will very largely determine whether the long-term trend toward universal higher education will continue its upward movement. If the schools are unsuccessful with these young people, then even conservative projections of future college enrollments are likely to be too optimistic. On the other hand, if fundamental changes in the schools can be made, it is likely that the pool of both intellectually able and college-capable students will be significantly enlarged by 1975 or 1980. In that event, even the most optimistic projections of future college enrollments may prove to be too low. The existence of the nonstudents in 1966 raises a large imponderable in planning future public commitments to higher education.

In terms of the present study, there is an important potential relationship between public policy and the nonstudents. This relationship is summarized in the word "motivation." If these young people can see that the educational process has a significant result, in the form of intellectual development and preparation for useful employment, their motivation may well be profoundly affected. Most young people will not achieve this result during the latter third of the twentieth century through widespread opportunity for secondary education; it will come only through opportunity for formal education beyond the high school. A public guarantee of equality of educational opportunity at this level can be expected to have far-reaching effects on student motivation in the elementary and secondary schools. Such a guarantee, however, will not affect motivation if made in isolation. It can only reinforce fundamental changes already under way within the schools.

Institutional Trends

The movement of successively larger proportions of the age group into American colleges and universities has been accompanied by significant changes in the nature of these institutions and their programs. Some changes are directly related to the characteristics of the young people who attend college at any one time. More are responses to underlying social and economic forces. The total effect of all the institutional changes over the years has been to produce a growing range and diversity of institution and program, all identified as part of higher education in the United States. The trend is in the direction of a comprehensive group of institutions of higher education that, collectively, embrace the full range of abilities and interests among all young people.

There is, as yet, no satisfactory nomenclature to describe these changes in institutional terms. Their scope and extent, however, is suggested by a few historical references. The colonial colleges that dotted the eastern seaboard at the end of the eighteenth century have evolved into several forms: the liberal arts college, the university centered on such a college, and the comprehensive metropolitan university. Normal schools for teachers, state universities, and land-grant universities appeared in the nineteenth century. The normal schools have since evolved into state teachers' colleges and are currently evolving into comprehensive colleges. The state universities and land-grant universities have evolved into complex institutions with commitments to research and public service as well as to teaching. In the twentieth century the two-year community college has been created, the urban university has developed, and there has been heavy emphasis on graduate and professional schools. Throughout the country's history, new institutions have been founded on one or another of the foregoing models, or on variations of them. Today, there are more than 2,000 institutions of higher education in the United States.

The diversity among these institutions is a source of strength to the country. Teaching, scholarship, and research are, by their nature, genuinely free enterprises. They thrive best when their environment is loose. Further, no one institutional form has proven to be any better than any other; the purposes they all serve are too varied for any one. Perhaps most important, the diversity among institutions of higher education permits the country to spread the risk in educating future generations. Without positive knowledge of what the future will require, it would be rash to assume that any one institutional form is dispensable.

There are strong indications that we are, as a country, diminishing our dependence on privately supported colleges and universities—a group that now contributes significantly to the diversity that characterizes the totality of higher institutions. Total college enrollments doubled throughout the country between 1955 and 1965. During this same period, enrollments at the public institutions ran well ahead of the overall increase. In 1955, one college student in every two was enrolled in a public institution. By 1965, the proportion had increased to two in three. Current projections for the next 15 years suggest that at least three out of every four future students will be enrolled in public colleges and universities.

This is a necessary trend because the private institutions have lacked the resources to provide the expansion of facilities needed to meet enrollment pressures in the years since 1950. The major part of the expansion came, of necessity, from the public sector. It would be a matter of serious consequence to the country if this trend continued beyond some critical point, below which the contribution of the private institutions was effectively eliminated.

The state of New York will be in a period of decision with respect to this issue for some years to come. For historic reasons, many of the country's private colleges and universities are located in New York and in other states along the Eastern Seaboard. State universities and land-grant universities, so widespread in the Middle and Far West, came into being after the colonial colleges in the East had been established. In 1965, 54 percent of full-time college students in New York were enrolled in private institutions; the corresponding national figure is 34 percent. The proportion in private institutions in New York is expected to continue to decrease, although by 1970 it will be only slightly below 50 percent. The trend beyond that date is, within limits, subject to action at the state level.

There is another side to this issue that is equally relevant to the present study: New York, and other states along the Eastern Seaboard, have been slow to recognize their inevitable dependence on the public colleges and universities. The State University of New York was founded in 1948, well over 100 years after comparable institutions were established in other parts of the country. Only within the past few years has financial support for this institution been commensurate with the state's need for a strong and viable institution of this type. Similarly, the City University of New York, which has a long tradition of public higher education, has only recently begun to receive the financial support necessary to do the job expected of it. The public community college movement advanced in other states before it began to gain momentum in New York. Now that the state has clearly recognized its future dependence on these public institutions, it is essential that they be given all the resources necessary for the accomplishment of their purposes.

New York's programs of student financial aid constitute an instrument of public policy that can have a significant influence on the future of public and private institutions within the state. Elimination of these programs would greatly hasten the trend away from enrollment in the private colleges and universities; this is clearly an undesirable outcome. On the other hand, continued expansion of the existing programs, without some change in philosophy and practice, would probably impede the healthy growth of the public institutions; this too is undesirable.

Institutional development in the United States has paralleled the increased heterogeneity among the college-going population. As observed above there is a long-term trend in the direction of finding that any high school graduate is capable of finishing college. The institutional trend is in the direction of providing a comprehensive set of universities, colleges, and programs—one that corresponds to the full range of abilities and interests among all high school graduates. The institutions of higher education in the state of New York are now advancing rapidly in this direction.

Trends in Consumer Expenditures for Higher Education

The financing of higher education in the United States is genuinely a joint enterprise. All colleges and universities depend on income from several sources, rarely from any one. Public institutions depend heavily on tax support, but they derive significant income from student fees and, in some cases, from endowments and gifts. Private institutions depend heavily on student fees and on income from endowments and gifts; they too, however, derive significant income from tax sources.

Consumer expenditures loom large in the financing of higher education as a whole. This fact is illustrated by U.S. Office of Education statistics for 1950 and 1960.[11]

Total income for all colleges and universities was $2.4 billion in 1950. By 1960, the figure was $5.8 billion, an increase of 140 percent.

Income derived by the institutions from state governments amounted to $0.5 billion in 1950. By 1960, the figure was $1.4 billion, an increase of 180 percent. Income from state governments amounted to 21 percent of total institutional income in 1950; by 1960, the proportion was 24 percent.

During this period, consumer expenditures played a role roughly comparable to expenditures by state governments. In 1950, institutional income from student fees totaled $0.4 billion. The figure for 1960 was $1.2 billion, an increase of 200 percent. Income from student fees amounted to 17 percent of total institutional income in 1950; by 1960, the proportion was 21 percent.

The foregoing figures understate the total of consumer expenditures for higher education because they are limited to fee payments to institutions and do not include other items that families consider legitimate expenses of college attendance. No exact total is known, but a rough indication is given by U.S. Department of Commerce reports on consumer expenditures for educational purposes. In 1960, these totaled $4.4 billion, of which an unknown part went for expenses at private elementary and secondary schools and for adult education.[12] It is probably reasonable to conclude that total consumer expenditures for higher education reached at least $2.5 billion in 1960 and may have reached $3.0 billion.

Consumer expenditures of this magnitude have not come easily to most families in the United States. This fact was recognized early in the 1950s, when serious study of the problem was undertaken and when large-scale student financial aid programs developed. The pioneering agency in this field was the College Scholarship Service of the College

Entrance Examination Board, which began in 1954 as a small association of private colleges and universities but which, as of November 1966, consists of 863 institutions, both public and private. The css has undertaken a number of significant studies of consumer ability to pay for higher education and of ways in which families' resources can be augmented in order to cover their children's total college expenses. These studies have not been conducted over a long enough period to establish significant long-term trends, but they do indicate the status of the problem at the present time.

The css has developed standards for determining family ability to pay college expenses from three principal sources: (1) a series of studies at individual colleges and universities; (2) statistical summaries derived from 1.2 million financial statements submitted to the css during the past 12 years by families who have children ready for or already attending college; and (3) cost-of-living studies made by government agencies. These standards are, in the last analysis, judgmental. They depend heavily on the experience of college financial aid officers and other specialists who have studied the evidence available.

These standards, for families at various income levels and with two or four children, are presented in Table 1. They represent the situation for what the css calls uncomplicated cases—that is, families who have no unusual financial circumstances. In families in which one parent is missing, or there are unusual medical expenses, or there are dependents outside the immediate family, these expectations would be reduced in accordance with the circumstances in the individual case. It can be seen from Table 1 that families whose net income is $15,000 can be expected to pay $3,010 or $2,170 toward college expense, depending on whether there are two or four children in the family. The corresponding figures at a $10,000 income level are $1,490 and $920, respectively.

The css standards for family ability to pay drop sharply at income levels below $10,000. For a family that has an income of $7,000 and four children, the expectation is only $400; this is about one-fifth the expectation for the family the same size that has an income twice as large. The difference is due to the pressures on families at the lower

Table 1. Parents' Contribution from Net Income by Size of Family—Uncomplicated Cases[13]

Net income before federal taxes	*Number of dependent children* 2	*Number of dependent children* 4
$ 4,000	$ 100	$ —
5,000	330	—
6,000	550	220
7,000	780	400
8,000	980	570
9,000	1,230	750
10,000	1,490	920
11,000	1,760	1,140
12,000	2,050	1,370
13,000	2,360	1,620
14,000	2,680	1,890
15,000	3,010	2,170

income level to meet expenses for basic necessities, such as food, shelter, and clothing, from limited resources.

The css standards are least reliable at low-income levels because relatively few children who attend college come from families whose income is in the lowest ranges, and factual evidence about willingness and ability to pay college expenses is virtually nonexistent. The standards suggest, however, that families that have four children and incomes of $5,000 or less are in no position to meet *any* expenses of college attendance. In the case of families that have two children, the css standards suggest that those whose incomes are less than $4,000 are, similarly, in no position to meet *any* college expenses.

It should be noted again that the foregoing statements apply to "uncomplicated" family situations and that a missing parent, heavy medical expenses, or more dependents would reduce these expectations considerably. These circumstances are highly significant in the individual case among families at income levels below $6,000.

Expenses of college attendance include tuition and fees, which vary widely among different colleges and universities. These range from $100 to $500 at many public institutions; to $1,000 at some private institutions and at public institutions for "out-of-state" students; to a figure that is now beginning to exceed $2,000 at the leading private colleges and universities.

Family expenses for college attendance are not limited to payment of tuition and fees. For resident students, other expenses include room, board, books and supplies, transportation between home and college, and incidental expenses. For students who live at home and commute to college, other expenses include food, an allowance for maintenance at home, books and supplies, daily transportation, and incidental expenses. These other expenses also vary in the individual case, although not to the degree that is true of tuition and fees. For resident students, they range generally from $1,200 to $1,500, exclusive of transportation to and from college. For commuter students, they are in the neighborhood of $1,000.

The relationship between family ability to pay and the current level of college expenses is illustrated in a generalized way in Table 2. The amounts shown are for a two-child family at three levels of college expenses. The "low" expense figure is $1,200, consisting of tuition and fees of $200 and other expenses of $1,000. This figure is typical for students who live at home and commute to low- or free-tuition public institutions. The "medium" expense figure is $2,200, consisting of tuition and fees of $1,000 and other expenses of $1,200. This figure is typical for students in residence at a private institution that has a moderate tuition by today's standards. The "high" expense figure is $3,500, consisting of tuition and fees of $2,000 and other expenses of $1,500. This is not a typical figure, but it does apply to some campuses for some students.

The entries in Table 2 show that a net family income of $9,000 is required to meet fully the expenses of college attendance in the least expensive situation: the case of the commuter student attending a low- or free-tuition public institution. At the two higher expense levels, the family incomes required to meet all expenses of college attendance are $12,500 and $16,500, respectively.

Table 2 also shows that a net family income of $4,750 is required to

*Table 2. Net Family Income Required to Meet Varying Proportions of College Expenses**

Level of total college expense	*Net family income required to meet*		
	25 percent of total expense	*50 percent of total expense*	*100 percent of total expense*
Low ($1,200)	$4,750	$ 6,250	$ 9,000
Medium ($2,200)	6,000	8,500	12,500
High ($3,500)	7,500	11,000	16,500

*** Generalized example for families that have two children.**

meet even a quarter of the expenses of college attendance under the least expensive situation. In that case, the CSS standard would call for $300 to be provided from family income and $900 to come from other sources.

This generalized analysis can be carried one step further. It is possible to relate family ability to pay and college expenses, on the one hand, to the distribution of personal income for all families in the United States, on the other. The results of this comparison, made on the basis of income figures for 1963, appear in Table 3. They illustrate in a rough way how the total expenses of college attendance are beyond the reach of substantial proportions of American families.

The percentages in Table 3 indicate that 27 percent of families in the United States in 1963 were unable to make any payments from family income toward college expenses. Only 28 percent of families had income

Table 3. Percentage of Families in the United States Able to Meet Specified Proportions of Total College Expense by Payments from Net Family Income[14]

Level of total college expenses	*Percentage of families in the United States*				
	Able to meet no college expense	*Able to meet some college expense*			*Able to meet all college expense*
		One quarter or less	*From one quarter to one-half*	*More than one-half*	
Low ($1,200)	27	7	16	22	28
Medium ($2,200) . . .	27	20	22	18	13
High ($3,500)	27	34	22	13	4

sufficient to meet all expenses of college attendance under the low level of expense assumed for this example—that is, attendance at a low-cost public college; 45 percent were able to meet some expenses at the low level, but not all. In the case of the medium level of college expense, only 13 percent of families could meet all expenses; 60 percent could meet some expenses, but not all. In the case of the high level of college expense, only about 4 percent of families could meet all expenses. A substantial 69 percent could meet some expenses from family income but would need to turn to other sources for the balance.

The CSS experience since 1954 has demonstrated two things about consumer expenditures for higher education throughout the country. First, tuition and fees are only part of the total expenses facing the student and his family. Other expenses for food, housing, books and supplies, and transportation are significant. The effect of low- or free-tuition is to reduce total college expenses, not eliminate them entirely. All students, whether attending public or private institutions, must meet some college expenses. Second, while family income is an important source of consumer financing, it is also a limited source. Relatively few families can meet total college expenses fully or even largely out of current income. The majority of families must look to other sources, and some families are entirely dependent on other sources.

There are, of course, other sources for financing college that are available to many families. Among these are family assets, such as savings, insurance, investments, and equity in a home. Some family assets, like bank savings, are liquid and can readily be converted to expenditures for college. Others, like home equity, are nonliquid and cannot be readily expended.

Family assets are a significant source of consumer financing for less than a third of families who now send children to college; the proportion would undoubtedly be less for all families in the United States, whether they have children going to college or not. This point is illustrated by the CSS experience during 1964-65 with the financial statements of more than 174,000 families whose children were entering college. Ninety-five percent of these families were able to make some contribution toward college expenses out of current family income. In contrast, only 43 percent were able to make such a contribution from family assets, and of these 13 percent could contribute less than $100 from this source. Considering the averages for all 174,000 cases, the css expectation from income was more than five times as great as the expectation from assets. These generalizations are made with respect to a relatively affluent group within the general population. The css sample for 1964-65 contained 34 percent of families whose incomes were more than $10,000 and only 16 percent whose incomes were less than $5,000. Corresponding proportions in the total United States population were 20 and 36 percent, respectively.

Loans constitute another important source of family financing for college. This source has grown rapidly during the past 10 years, with the creation of the National Defense Student Loan Program and more recently with the organization of the Guaranteed Loan Program of the U.S. Office of Education. These federal programs are augmented by state programs, such as the New York State Higher Education Assistance Corporation. The latter agency, in fact, preceded the federal programs and served as a model for them. Banks and other lending institutions in the private sector have also served as a source of consumer credit for higher education. No reliable national statistics are available on the extent of present use of loans on the part of college students and their families. The rate of growth in the use of this source, however, has been little short of phenomenal. The New York State Higher Education Assistance Corporation reports a twelvefold increase in the dollar volume of loans guaranteed under that agency's program, between 1960 and 1965.

There is an important issue of public policy with respect to the use of loans in the financing of higher education. The issue is not whether loans should be utilized as a source of consumer financing; there is clear evidence from the past 10 years that this source has been highly useful and that it has supported a substantial expansion in the size of the college-going population. The issue, rather, is whether there is too much dependence on loans and not enough on other possible sources of finance. From an economic point of view, student loans represent deferred financing out of future personal income. Loans are thus a device to enlarge the contribution from the consumers of higher education: the student and his parents. Except for public subsidy of interest charges and the guarantee features of public loan programs, loans represent consumer expenditures for higher education. As observed earlier in this review, consumer payments for student fees in 1960 totaled $1.2 billion for the entire country. This figure was contrasted with payments by state governments to colleges and universities that totaled $1.4 billion in the same year. If the expenses of college attendance beyond tuition and fees are considered, and if the marked growth in the use of loans since 1960 is also considered, it seems quite likely that, by 1966, consumer expenditures for higher education are running well in excess of public expenditures at the state level. In philosophical terms, to what extent is higher education a personal privilege and to what extent is there gain, beyond the individual, that extends to the public at large?

Gift scholarships have been a traditional part of the higher education scene. The trend since 1950 has been in the direction of increasing the size and the number of scholarship awards. There has also been a strong tendency to limit scholarship awards to students who are identified as highly able, in the intellectual sense, and to scale the amount of the award to demonstrated financial need. These are clearly desirable trends and tendencies. At the same time, there is good reason to doubt that the growth in scholarship awards has kept pace with rising enrollments and with increased expenses of college attendance. The major scholarship agencies and the colleges and universities most active with scholarship programs of their own report limited funds for scholarship purposes and known needs among worthy students that they are unable to meet.

The tight situation with respect to scholarship funds has led most colleges and universities into what is known as "packaged" awards consisting of a job, a loan, and a scholarship award. The total of the package is scaled to financial need, but the scholarship component typically runs considerably less than demonstrated financial need. The College Scholarship Service studied the award practices of some 1,200 colleges and universities in 1963-64. It found that, of some $250 million disbursed by the institutions as financial aid to students, only $120 million was disbursed in the form of scholarship awards. A larger sum, $130 million, was disbursed in the form of loans ($85 million) and jobs ($45 million).[15] The "package" concept in the administration of student financial aid by colleges and universities has resulted in a marked increase in the total amount of money available for this purpose. It has also served to emphasize the student's responsibility for his own education by asking him to take on a part-time job during term time and take out a loan against his future earnings. At the same time, the appearance of this concept is symptomatic of the inability of colleges and universities to enlarge the scholarship award component in their financial aid programs, in the face of rising enrollments and increased college expenses. The colleges are, in effect, stretching their limited scholarship dollars by augmenting them with loans and jobs.

There is one further aspect of consumer financing that requires mention. Young people of college age are adult in more ways than not. In an economic sense, they are capable of productive employment: they are eligible for military service, and they may lose their income tax status as dependents at age 18. Their decisions to attend college, in economic terms, represent decisions to forego the prospect of immediate income in favor of future income that is expected to be larger as the result of the college experience. Foregone income is thus a hidden expense of college attendance that is, presumably, regained at a future date. The question is whether they and their families have the resources to invest foregone income in a college education.

An estimate of foregone income was made by Theodore W. Schultz using national statistics for 1956. For students enrolled in college that year, the average foregone income was $2,003. When this figure was adjusted for the unemployment rate, it became $1,943. A study of the Coordinating Council for Higher Education in California considered Schultz' analysis and concluded: "When this cost element is considered from the standpoint of the student and his family, it is evident that the student is contributing some 60% of the total cost of his education in terms of foregone earnings . . . and that he exceeds that percentage by the amount of fees and additional expenses (books, supplies, travel) he incurs in undertaking his education."[16]

The present pattern of consumer expenditures for higher education is thus characterized by a heavy reliance on sources available to the students and their parents: current family income, loans against future income, and family assets. These are offset by the existence of low- or free-tuition institutions and by scholarship programs. If the concept of foregone income is accepted, it is likely that consumers are bearing a share of the burden that is greater than that borne by all public agencies, by all tax sources, and by all gifts and endowments to institutions of higher education. A comprehensive accounting would probably show that the individual student, and his parents, are now bearing a heavier burden than the public at large.

During the past 15 years, this pattern of expenditures has sustained a mass movement toward higher education on the part of young people from middle-income families. The question for the future is whether this pattern is congruent with the financial strength of families not now well represented in the college-going population: those in the lower income groups. By all available measures, these families lack the financial strength to be effective consumers of higher education under existing expenditure patterns.

Conclusion

In this summary of major trends affecting access to higher education, consideration has been given to overall enrollment trends and manpower requirements in the nation's economy. Reference is made to the intellectually able students and the advances made with respect to them since 1955. It is clear that the ability to do college-level work is, to an increasing extent, defined in terms of the ability and achievement required to graduate from high school and enroll in one or another of an increasingly varied group of institutions called colleges. The more rigorous intellectual standards are true at some colleges but not all.

College-capable students who do and do not go to college are distinguished more by socioeconomic status than by individual ability and achievement. Some of the reasons for this imbalance lie in present patterns of consumer expenditures for higher education that place a heavy emphasis on resources available to the student and his family—resources that are totally inadequate for many families whose children do not now go to college.

Also considered above was the case of nonstudents, the young people in the poverty population who need so much and whose potential for intellectual development is so great. All the foregoing concerns would apply to them if programs in the schools adequate to their needs can be devised.

There is economic return to the general public from the college education of most of these young people, whether they are intellectually able or college capable. It is not likely that this return will be realized by depending on consumer financing as heavily as is now the case. There is no alternative but large-scale public expenditures in their behalf and as an investment in the future.

The background for the present study, then, concerns the mass movement toward higher education in the United States—a movement that has extended, within two generations, to reach about half of the country's young people. Whether the remaining half will be reached during the next generation depends on many things. Among the more important is the degree of public commitment that will be made by the several states to make higher education financially accessible to all citizens.

Aspects of the Current New York Scene

New York State's Programs of Financial Aid to College Students

The people of the state of New York first acted to provide public funds for scholarship purposes just a century ago. The initial move was prompted by the designation of Cornell University as the state's land-grant institution and was designed to cover tuition there for a period of four years. Initially, 128 Cornell University Scholarships were awarded each year, on the basis of performance on a competitive examination; in 1895, the number was increased to 150. Stipends were $100 per year. The long-term significance of the Cornell Scholarships was the acceptance by the state of the land-grant principle in higher education—namely, that higher instruction in "agriculture and the mechanic arts" was a responsibility of the state and should be made available to qualified students without payment of tuition.

Regents College Scholarship Program. In 1913, the state legislature enacted the Regents College Scholarship Program: 750 four-year scholarships were provided, to be awarded by competitive examination and according to residence in the various assembly districts. The stipends were $100 per year. This action represented a far broader commitment by the state than was the case with the Cornell Scholarships. In this instance, the commitment was to the principle of free tuition in all the colleges and universities then operating within the state, not just at the land-grant university.

James R. Spence, in a report prepared for this study, observed that when the Regents Scholarships were initiated, "New York State graduated approximately 15,000 students per year from its high schools and academies, of whom about five per cent continued on to colleges, and college tuition charges were typically $100 per year. The relationship between these facts and the original awards of 750 scholarships per year seems more than coincidence . . ." Governor William Sulzer, who signed the scholarship bill, made two relevant observations. He cited the state's "obligation to provide free education from the kindergarten through the college." He also pointed out that the state would be spending $300,000—an amount "practically the equivalent of the maintenance of a State University."

The Regents College Scholarship Program has since represented New York's unique response to the national interest in open access to higher education. Many states west of the Appalachians had, by 1913, developed their publicly supported state universities. New York, because of its colonial and early nineteenth-century heritage, was already in possession of a group of privately supported institutions. It elected to utilize the private institutions by means of a comprehensive scholarship program. In doing so, it developed an effective financial alternative, from the student's point of view, to the free-tuition public college or university.

The period between World War I and World War II was a relatively stable one for the state's scholarship activities. Selection procedures were developed and modified; by the 1930s, awards were based on an average of performance on the Regents Academic Examinations—the "single course" examinations in the college preparatory sequence that were the basis for the Regents High School Diploma. Scholarship selection was thus tied closely to the broader examining function that was a hallmark of New York's supervision and support of the local public schools.

The period of the 1920s and 1930s was not, however, a stable period in education. The comprehensive high school had come of age and was dealing with a clear majority of the age group. The trend toward greater college attendance was greatly strengthened by that development and by the unemployment situation during the Depression. College tuition remained low, but it was becoming apparent that low tuition was being subsidized in considerable part by a generally low level of salaries for faculties. The full effect of the impending changes was delayed by World War II; in the event, that conflict served greatly to reinforce many existing pressures for change.

The beginning of postwar change was visible in the Regents Scholarship Program during the late 1930s. In his report for this study, Warren G. Findley states: "By 1940, the pressure of numbers admitted to high school in the 1930s and now seeking support for higher education forced some rethinking about the whole examination program. The 'psychology of individual differences' was hitting the high school with full force. A single passing standard, high or low, did not readily fit the diversity of goals as well as abilities in the secondary schools. Moreover, the Regents Academic Diploma program limited the competition not simply to college prospects, but to ones who had determined upon that program early and begun a three-year elective sequence in a foreign language or in science in tenth grade. All forces combined to promote development of a 'Regents Scholarship Examination,' opening the competition more widely to accommodate student diversity, yet preserving the structure of Regents examinations for general reference in maintaining a concept of academic excellence or adequacy in instruction."[17]

In 1946, the first step was taken in what proved to be a series of increases in the size of the stipends in the Regents College Scholarship Program. The stipend had been $100 for 33 years. It was increased to $350 in 1946; to a maximum of $750 in 1958; and to its present maximum of $1,000 in 1964.

An even more dramatic series of increases in the number of Regents College Scholarship awards began in 1947. The number of high school graduates aided was originally set at 750 in 1913. That number was increased to 827 in 1947; to 1,654 in 1949; to 1,694 in 1954; to 3,388 in 1955; to 5 percent of high school graduates in 1957 (4,979 students that year); to 15,242 in 1961; to 16,242 in 1962; and to the present level of 18,835 in 1964.

These changes were accompanied by the introduction of a requirement that family ability to pay the expenses of a college education should be considered in determining the size of the stipend. This was not a consideration in the program before 1958. In that year, ability to pay, as measured by the net taxable income reported for state income-tax purposes, determined the size of the stipend within a defined range of $250 to $750. The range currently is $250 to $1,000. This change did not affect the selection of students to receive stipends in the first place; that selection continued to be highly competitive under the

Regents Scholarship Examination. Nor did ability to pay affect the designation of tuition as an upper limit on the size of the stipend; stipends continued to be scaled to the actual tuition and fees facing the student, up to the defined maximum.

Other Competitive Scholarship and Fellowship Programs. In 1936, a program of 40 scholarships was established for the children of disabled or deceased war veterans. This program has been enlarged on several subsequent occasions and continues today with 500 scholarships at a fixed stipend of $450 per year. This was the first of a series of specialized programs.

In 1949, action was taken with respect to financial aid for students at the graduate and professional level. A program of medical and dental scholarships was established in that year. This was followed by one in basic nursing in 1956; a fellowship program in college teaching in 1958; and subsequently by the Lehman Fellowships in social sciences and public affairs and the Regents Fellowships in the arts, sciences, and engineering. Specialized programs for the veterans of World War II and for undergraduates in engineering and science were started, then discontinued between 1944 and 1962. Finally, a program for veterans from the Vietnam conflict was started in 1966.

Characteristics of the Competitive Programs. Developments to this point resulted in the operation of a series of competitive scholarship and fellowship programs, as summarized in Table 4. The philosophy underlying these programs is similar, although there are differences of detail among them, some major and some minor.

In the first place, all these programs are competitive in the intellectual sense. Students are selected to receive awards on the basis of written examinations. All the undergraduate programs use the Regents Scholarship Examination for this purpose. It is a six-hour test of scholastic aptitude and achievement, composed largely of multiple-choice questions. An unusual feature of this examination is that it includes an English writing exercise, which is used as a qualification test—that is, a student must demonstrate a minimum competence in writing, regardless of his performance on the multiple-choice questions, or he will not

Table 4. Summary of New York State's Competitive Scholarship Programs, 1966[18]

Program	*Range of annual stipend*	*Number of new awards each year*
Regents Scholarships for undergraduates		
Regents College Scholarships	$250 – 1,000	18,835
Basic Nursing	200 – 500	600
Cornell University	100 – 1,000	65
Children of Veterans	450	600
War Scholarship for Veterans	350	300
Scholarships and fellowships for graduate and professional students		
Lehman Fellowships	5,000[*]	90
Regents Graduate Fellowships		
College Teaching–Beginning	500 – 2,500	250
College Teaching–Advanced	500 – 2,500	100
Arts, Sciences, or Engineering–full-time study	500 – 2,500	100
Sciences or Engineering–part-time study	250 – 1,250	100
Regents Scholarships in Medicine, Dentistry, or Osteopathy	350 – 1,000	108[†]
Regents Scholarships in Advanced Nursing	750	30

[*] The $5,000 stipend applies to a student who has completed at least one year of graduate study. For students who have not completed one year of study the award is $4,000.

[†] These awards are divided between 80 awards for medicine and 28 for dentistry. The number for osteopathy is determined each year by legislative action.

be eligible to receive a scholarship. An order of merit is established by the examination results for each of the undergraduate programs. In the case of the Regents College Scholarship Program, the merit list is now established separately by counties, rather than statewide. The Basic Nursing Program is also operated on a county-by-county basis. The Cornell Scholarships are competitive within each senatorial district, and the Children of Veterans Program is competitive statewide.

In practice, the undergraduate programs are moderately but not highly competitive. The effect of the county-by-county competitions is to lessen the emphasis on examination performance and give some positive weight to the fact of residence in a rural or central urban area. Further, the number of undergraduate scholarships approaches 10 percent of the state's high school graduates; to this fact should be added the effect of declinations on the part of about 25 percent of high-scoring students who elect to go to college out of the state and thus forego their Regents Scholarships. For these various reasons, the Regents undergraduate programs do not result in the selection of the top 10 percent of high school graduates; rather, 10 percent of high school graduates are selected from among the top 20 percent, or perhaps 25 percent, of high school graduates, according to performance on the examination.

The graduate and professional programs are more competitive. Competition is keen for the Lehman Fellowships, which are open to any citizen of the United States. All the graduate programs use the device of the competitive examination. In addition, the Lehman Fellowships Program and the Regents Graduate Fellowships Program use academic record in college and an assessment of personal qualifications. All the graduate programs are conducted on a statewide basis except the Lehman Fellowships Program and the medical scholarships program.

The second point of similarity in philosophy among these programs occurs with respect to limitation of the amount of the stipend according to the actual tuition facing the student. Here too, however, there are differences and some exceptions. The Regents College Scholarships and the Basic Nursing Scholarships recognize instructional fees, in addition to tuition; the total of the two thus constitutes an upper limit on the award. The Children of Veterans Program, however, provides a fixed stipend; if the award exceeds tuition and instructional fees, the balance may be used for other expenses of college attendance. The fact that the fixed stipend for this program is only $450 modifies the extent to which this program is an exception to the tuition principle. A more serious exception to the tuition principle occurs in the case of the large Regents College Scholarship Program and the Basic Nursing Program. In these programs, the tuition limitation is expressed as follows: "The award may not exceed the cost of tuition and fees charged by the college, or $350, whichever is greater." The effect of this provision is to permit the use of the stipend for expenses of college attendance, other than tuition and instructional fees, up to an operating limit of about $250 per year, when the scholar attends a free-tuition institution and when the instructional fees are in the neighborhood of $100.

At the graduate and professional level, the Lehman Fellowships clearly go well beyond the tuition principle and provide generous assistance for all the expenses of graduate study. The Regents graduate and professional fellowships do not have a built-in limitation to tuition and fees. The maximum stipends of $2,500 permit some assistance toward expenses other than tuition; the amount of this assistance can be moderate or considerable, depending on the individual case.

The third point of similarity in philosophy among these programs occurs in the use of an ability-to-pay principle in determining the stipend in the individual case. Here too, however, exceptions exist. All programs, except three, relate the size of stipend to the net taxable income reported for state income tax purposes. The notable exception is the Lehman Fellowships Program, with its fixed stipend of $5,000. Minor exceptions exist in the Children of Veterans Program and the Advanced Nursing Program. In these cases, the stipends are relatively low ($450 and $750, respectively), and financial need can usually be assumed.

The existence of minimum stipends in all programs that utilize the ability-to-pay principle constitutes an important exception to that principle. The minimum stipend is $250 in the large Regents College Scholarship Program and is paid without regard to demonstrated financial need. Further, this stipend can be paid over a period of four years, so that a total of $1,000 can be received by a student and his family who are financially capable of meeting all the expenses of college attendance. The minimums for the remaining programs are given in Table 4 and range from $100, in the case of the Cornell Scholarships, to $500, in the case of the Regents Graduate Fellowships. The maximum terms for these awards range from one to four years.

A fourth point of similarity among the competitive scholarship and fellowship programs exists in limitations pertaining to residence in New York State and attendance at institutions of higher education within the state. All the undergraduate programs are limited to residents of the state who study at approved colleges and universities within the state. Although a national competition is conducted for the Lehman Fellowships, winners are required to attend graduate schools within the state. A contrast is provided by the College Teaching Fellowships. In this case, only residents of the state are eligible, but winners may study at any approved university in the United States. The remaining graduate and professional programs are generally limited both to residents of New York and to study at approved institutions in the state.

The differences and exceptions noted in the foregoing discussion should not be allowed to obscure the very important points of similarity in philosophy that exist among the programs considered. In general, these programs are characterized by (1) adherence to acceptable intellectual standards in the conduct of the various competitions; (2) limitation of the awards to the support of tuition and instructional fees, not the total expense of college attendance; (3) limitation of the awards according to the financial ability of the student and his parents; and (4) limitation to residents of the state who study at a college or university within the state. Together, these characteristics constitute the underlying rationale that has been developed for these programs over the years.

One further characteristic deserves emphasis. The various Regents scholarships and fellowships constitute a basic program of awards that can be and is supplemented by awards from colleges, universities, and private agencies. The effect of this provision is to permit institutional awards toward the total expenses of college attendance. The supplemental award may cover that part of tuition that is not met by the Regents award, and it may cover some or all of the other expenses. In general, college awards are subject to the requirement of demonstrated financial need, so that the combined total of the two awards does not exceed need. Also, in general, college awards are "packaged" in the form of scholarships, loans, and jobs so that the supplement may be in any combination of these three components. The important point, however, is that the Regents awards underlie the college awards and thus free institutional funds so that they are used for expenses not recognized in the Regents' programs.

Scholar Incentive Program. The Scholar Incentive Program, established in 1961, represents a major departure from all the programs discussed above. Whereas earlier programs involve competitions that range from moderately keen to very keen, the Scholar Incentive Program is not competitive but is directed toward the mass of students going to college. Awards under this program go to students who are residents of the state and who are matriculated in a college or university in New York, in an approved full-time program. The intellectual standards required to receive an undergraduate Scholar Incentive award are such that 80 percent or more of high school graduates could qualify, although in practice, a considerably smaller percentage do qualify by matriculating in a full-time undergraduate program. The intellectual standards for Scholar Incentive awards at the graduate level are more rigorous but still considerably less rigorous than those operative in the various graduate scholarship and fellowship programs.

Scholar Incentive awards are given for eight semesters of undergraduate study and for an additional eight semesters at the graduate level. The annual stipends range from $100 to $500 for undergraduates; from $200 to $600 for first-year graduate students; and from $400 to $800 for graduate students after the first year. They are scaled to ability to pay, as measured by net taxable income, reported for state income-tax purposes. They are limited to payment of tuition and, unlike most of the various scholarship programs, the Scholar Incentive awards may not be used to cover instructional fees.

These awards may be received in addition to awards under the various scholarship and fellowship programs sponsored by the Regents; but they are always limited to payment of tuition. In practice, about 60 percent of Regents scholarship and fellowship holders now also receive Scholar Incentive awards.

Scholar Incentive awards also may be, and are, supplemented by awards from the colleges and universities. The supplemental awards are generally subject to "packaging" and to an overall limitation according to ability to pay. It is important to point out that many students who can qualify for Scholar Incentive awards cannot meet the academic standards required for most college-sponsored financial assistance programs.

The Scholar Incentive Program extended the state's student financial aid program in two major ways. First, it resulted in a dramatic increase in the number of students receiving assistance. Second, it greatly increased the total dollar volume disbursed by the state each year. The overall statistics for 1965-66 show the extent of both of these efforts. In that year, 73,000 students received a total of $31 million in the form of Regents scholarships and fellowships. In contrast, 165,000 students received a total of $34 million in the form of Scholar Incentive awards.

Conclusion. New York State's present effort in the field of student financial aid is larger by a factor of several times than that of any other state. This effort has direct influence on some 200,000 students enrolled in the state's colleges and universities, both those who are intellectually able and those here called college capable. It has indirect influence on the on-coming generation of intellectually able and college-capable students. It has potential influence on the young people here called nonstudents. The effort also has indirect influence on educational institutions throughout the state and on what they are trying to do with these same young people. This is true not only of the colleges and universities but also true of the elementary and secondary schools. New York's present effort has the promise of eliminating financial barriers to higher education. This promise and some of these influences, as they exist in the current scene within the state, are considered in detail in the following pages of this report.

Changing Patterns of College Attendance in New York

In the preceding sections of this report the major national trends affecting access to higher education are identified and discussed. In what follows, some of these trends are considered in greater detail, as they are currently operating on the New York scene. Much of the information in the following discussion is drawn from James R. Spence's report to the study.

Overall Enrollment Trends. In 1965-66, a total of 340,000 students were enrolled full time at all levels in New York's colleges and universities. This group constituted approximately one-third of the total 18-21 age group.

By 1970-71, college enrollments in New York are expected to reach between 445,000 and 456,000, or between 37 and 39 percent of the age group. By 1980-81, college enrollments are expected to reach between 650,000 and 692,000, or between 45 and 48 percent of the age group.

The foregoing projections contain a large unknown. They are based on careful studies of the New York State Department of Education and are undoubtedly realistic for the years between now and 1970. These studies also show the existence of a large additional group of *potential* college students. The size of this group has been estimated according to standards defined by the President's Commission on Higher Education in 1947 and according to standards developed within the New York State Department of Education, based on a study of student records. The conclusion is that there are college-capable students who are not now expected to enter college; if they did, the projected college enrollments reported above might be from 15 to 40 percent higher in 1970-71.

The basic source of future college students is the state's secondary schools. High school students are graduating today at a rate slightly in excess of 200,000 per year. By 1970, this figure will approach 250,000. By 1980, it is expected to be higher than 280,000. It is worth noting that the high school graduates of 1980 are just now entering the elementary schools. If the potential of these boys and girls could be fully realized between now and 1980, New York's college enrollments that year would approach one million students, instead of the 692,000 students now projected.

Increasing Graduate Study

Spence reports that "various data show New York State has consistently enrolled a large proportion of the graduate students and awarded a larger proportion of the various higher education degrees than its proportion of the national population would indicate." This position will surely be maintained and extended as the result of recent developments at the State University of New York and the City University of New York.

There are currently 38,000 full-time graduate students enrolled in New York State. This figure is expected to increase to 52,000 by 1970-71 and to 79,000 by 1980. Part-time graduate students currently number 59,000. This figure is expected to increase to 82,000 and 127,000 by 1970 and 1980, respectively.

Spence attributes this growth, in part, to the "knowledge explosion." He says:

"Because there is more to be taught in almost every field of knowledge, a student preparing for an entry level position in almost every field of endeavor continues his formal education over a longer period of time. Within slightly more than a generation, teachers have seen educational requirements grow from a two-year training class following high school to five years of college study for full certification. Engineering, pharmacy, and other fields have recently moved from a four-year to a five-year program of study. In many fields, the master's degree now represents the same pinnacle of formal education for many people that the bachelor's degree served for many years when high school graduation was less common. The same knowledge explosion has resulted in the greater incidence of post-doctoral studies, which most commonly consists of one to three years in a research appointment after completing the doctoral degree requirements."

The Spence report goes on to discuss the relatively small number of graduate fellowships and scholarships in the New York program and the practice of limiting these awards to designated fields of study. The state's present underemphasis on financial assistance at the graduate level is indicated by a comparison of the number of awards at the graduate level with the number of awards at the undergraduate level, and current enrollment figures for the two levels. In 1965-66, there were 38,600 graduates and 292,000 undergraduates enrolled at colleges and universities of the state on a full-time basis. Present legislation provides about 1,100 graduate fellowships and scholarships and about 80,000 undergraduate scholarships in any one year. The ratios between enrollments and awards at the two levels suggest that there is 1 award for every 3.6 undergraduates but only 1 award for every 35 graduate students, or 10 times as many undergraduate awards. These ratios are not corrected for interstate migration of students, but such a correction would not change the general conclusion. The Scholar Incentive Program is, of course, operative at both levels and provides larger stipends for graduate students, but some imbalance clearly exists.

The federal government has been very active in the areas of graduate fellowships. Further consideration of this question is deferred to a later section of this report in which the relationships between the two levels of government are explored.

Development of the Two-year Colleges. Another source of substantial increase in enrollment trends is the two-year community college. Spence reports that students in two-year colleges constituted 10 percent of the total undergraduate enrollment in 1960. The proportion is expected to increase to more than 17 percent by 1970. The 1960 Master Plan of the State University noted that "the manpower needs of the State of New York require that a minimum of ten percent of the 18-19 age group should undertake full-time study in two-year scientific and technical programs."[19]

The two-year community colleges serve two principal educational functions: (1) that of providing a university-parallel program that provides access to a four-year college, and (2) that of providing a variety of career programs in subprofessional and vocational fields. Spence indicates that, for the community colleges associated with the State University, the division of enrollments between the two types of programs will be fifty-fifty by 1970. This means that one out of every two community college graduates will expect to transfer to a four-year institution for the completion of undergraduate work. Spence also suggests the possibility of a reverse-transfer situation, in which students with specialized training at two-year colleges may seek general education at the four-year institutions during their last two years of undergraduate work.

Spence identifies two significant implications for the financial aid program that arise from the development of the two-year colleges:

"There are some marked and significant implications for the State's financial aid program in the rapid and sizable development of the two-year college. First, the wider variety of studies and the greater proportion of programs which call for more manipulative, performing, or creative skills, as contrasted with the more verbal-academic skills normally thought of in a college program, raises a serious question about the validity and equitability of the present examination as a basis for making financial awards. Indeed, the diversity of programs challenges the validity of any single evaluative instrument now available.

"A second implication raised by the consideration of the two-year colleges' enrollments is the need for access to the state's scholarship program of the 'late bloomer' who could not qualify on the basis of his earlier performance in high school, but whose maturation and motivation have wrought a change which would later qualify for financial support."

The spectacular development of the two-year community colleges has highlighted the problems identified by Spence. Educational programs that emphasize "manipulative, performing, or creative skills" are by no means confined to the two-year institutions; they are present in four-year colleges and universities as well. Similarly, the "late bloomer" is present also on the four-year campuses. The significant point is that education programs at the college level are increasingly varied with respect to content and with respect to their demands for abstract intellectual skills of a high order. There is today a greater chance for a student—any high school graduate—to find a college program he can undertake successfully.

Part-time College Study. Part-time college students account for a substantial 45 percent of all students enrolled in New York's colleges and universities in 1965-66, at both the graduate and undergraduate levels. According to current State Department projections, this proportion is expected to stay the same at least until 1980. In that year, when full-time enrollments are expected to be between 650,000 and 692,000, part-time enrollments are expected to reach about 562,000.

The various scholarship and fellowship programs (with one minor exception) and the Scholar Incentive Program require full-time study as a condition on receipt of an award. This requirement excludes a substantial number of students who have demonstrated ability and motivation for college work.

The schedule for the completion of this study has precluded an adequate review of the problem of the part-time students. There are sound educational reasons for promoting full-time study on the part of high school graduates who enter college and on the part of college graduates who undertake a rigorous graduate or professional program. The intensity of a full-time experience results usually in greater efficiency of learning and better utilization of time and of material resources.

On the other hand, part-time study provides real educational advantages under certain conditions. The opportunity to alternate between study and employment in some planned pattern can provide reinforcement for learning when the study and the employment are in related fields—for example, when a part-time student in accounting is employed by an accounting firm. Further, the general trend is toward continuous education on the part of adults, who seek to improve their general knowledge or bring their knowledge of specific skills up to date. The adults who take one or two courses on a part-time basis make up a substantial proportion of the total part-time student enrollment. Whether this group needs financial assistance from the state is an open question.

Perhaps the most significant question is whether part-time study on the scale now observed in New York is symptomatic of the fact that substantial numbers of individuals are unable to afford full-time college study. It is entirely possible that this may be the case to a significant degree. A study of the part-time student population in New York should be made in order to investigate this question.

In-state and Out-of-state Migration. In 1963, some 92,000 residents of the state of New York were enrolled at colleges and universities outside the state. Some 56,000 residents of other states were then enrolled at New York's higher institutions. This represents a net out-migration of 36,000 students. The situation with respect to migration is markedly different at the graduate and undergraduate levels. At the graduate level, more students enter the state than leave for out-of-state institutions. At the undergraduate level, out-migration predominates.

New York's present financial aid programs, for the most part, are limited to residents of the state who attend colleges or universities within the state. This limitation, together with the tendency toward out-migration, has prompted a lively debate as to whether the limitation should be removed in whole or in part.

The Heald Commission estimated in 1960 that out-migration will diminish in the future. The Commission attributed out-migration to the lack of "a low cost, high quality state university in New York State comparable to that existing in other leading states." The Commission also observed that, "In the future other states can be expected to absorb a smaller proportion of New York State students than in the past."[20]

Events since 1960 have confirmed the accuracy of the Commission's conclusions. Developments at the State University, and also at the City University, suggest that the lack of a "low cost, high quality state university" is rapidly being overcome. The competition for admission to the leading state universities in other states has become severe in the years since 1960. The degree of competition among out-of-state applicants to these institutions is now comparable to the competition existing at the highly selective private colleges and universities.

The arguments for removing the present restriction on out-of-state study can be placed under one or another of two general headings: (1) those pertaining to the individual student's freedom of choice to select the college or university that will best meet his requirements; and (2) those pertaining to the public interest in promoting student mobility among the several states as a means of reducing provincialism. These are persuasive arguments that could be developed at length.

On the other side of the question is the argument that other needs exist within the state that are not now being met under the financial aid programs and that deserve priority over the support of attendance at out-of-state colleges. In the judgment of most of the individuals associated with this study, this is the situation today. These other needs are described in subsequent sections of this report. It is the judgment of the study staff that the out-of-state problem is not sufficiently urgent to justify a general reversal of New York's traditional position on this point.

There may be particular instances where partial removal of the limitation on out-of-state study can and should be made. Two possibilities have come to the attention of the staff during the course of the present study, but there has not been time to investigate them thoroughly. The first arises from the fact that an increasing number of states are permitting some out-of-state students to participate in their own state scholarship programs. This development suggests the possibility of reciprocity agreements between states that would promote a wholesome interstate mobility of college students. Second, it may be that the case of a Negro boy or girl in New York who wants to attend a predominantly Negro college or university outside the state is a case that should be considered an exception under generally prevailing policy. It is important that these possibilities be investigated.

Intellectually Able Students and the Regents College Scholarship Program

More than 149,000 candidates participated in the 1966 Regents scholarship competition for high school graduates, a group that amounted to 72 percent of high school graduates throughout the state. In 1958, only 33 percent of high school graduates entered the competition. The 1966 students competed for 18,835 Regents College Scholarships. In addition, some of them were also competing for the 1,165 scholarships involved in the programs for basic nursing, for Cornell, and for the children of veterans. These 149,000 students constituted more than 183,000 "competitions" for Regents undergraduate scholarships.

The present study focused on the largest of these competitions, the Regents College Scholarship Program, and on three aspects of this program: the Regents Scholarship Examination, the selection of students to receive scholarships, and the procedures for relating the size of the award to family ability to pay. The consultant reports of Warren G. Findley, George A. Kramer, and Martin Meade provided much of the information for the following discussion.

The Regents Scholarship Examination. All the Regents scholarship programs for high school graduates use the Regents Scholarship Examination (RSE) as the means by which winners are identified. In the case of the College Scholarship Program, separate competitions are run on a county-by-county basis; within each county, winners are identified on the basis of performance on this examination. The same county procedure is used for the Basic Nursing Program. The Cornell Scholarships are competitive within senatorial districts, whereas the program for children of veterans is competitive on a statewide basis. Despite these geographic variations, the examination is the keystone of the selection procedures for all the Regents undergraduate scholarships.

The Findley report first considered the RSE as a selection test in comparison with other tests available for use in selective admissions to college and in the award of scholarship aid. Findley reviewed the content of the examination and compared it with the College Board's Scholastic Aptitude Test and Achievement Tests, with the Psychological Corporation's College Qualification Tests, and with the American College Testing Program. He also considered the statistical evidence available for these various tests. His overall judgment was that the RSE ". . . may be said to be of high quality and well suited to the selective admissions function (it was) designed to serve."

However, Findley expressed one important exception to this overall judgment, an exception that pertains to the use of an essay section of the RSE as a qualifying device. Findley's discussion of this point is as follows.

"The essay portion of the test has had a checkered history. From the beginning in 1940, it has been accepted that the winner of a scholarship should show proficiency in expository prose. Conversely, to omit such a measure, it was felt, would be to deny the importance of writing skill. Yet the grading of essays has always involved unreliability and the sheer burden of scoring time. Moreover, in most checks of predictive power, the objective portion of the Regents Scholarship Examination has been a better predictor of college grade-point average than the essay(s). Indeed, the objective portion has commonly shown virtually as high predictive power as the multiple regression equation using the essay score in addition.

"The present practice, in effect, ratifies this limited role for the essay portion of the Regents Scholarship Examination. Each scholarship candidate is asked to write an essay, which is graded for unity, coherence, and organization, as well as for grammatical correctness. But the burden of grading is limited by rating only those papers for which the corresponding objective scores put the candidates in contention for an award. The effective weight of the writing is then limited by providing that only distinctly poor papers shall disqualify candidates, all other candidates shall be passed and ranked on the basis of the objective score alone. Even this weight is further circumscribed by the requirement that papers deemed unsatisfactory by the first rater must also be deemed unsatisfactory by a review committee of similar raters and by a special committee of the State Education Department. Thus, to have the effect of disqualifying a candidate, his essay must be a three-time loser in successive ratings. The effect is so limited that of the 20,000 who would have qualified as scholarship winners last year on the basis of objective score alone, only 55, or a quarter of one percent, were disqualified. Likewise, only 66 of the potential alternate winners were disqualified."

Even these safeguards against the unreliability of an essay test prove to be inadequate, in Findley's judgment. He continues: "The general effect, then, of the essay portion is limited to a few who write quite badly. However, the impact is total so far as the individuals affected are concerned. After scrutinizing papers of three candidates who were disqualified for writing, despite making objective scores of 269(!), 243, and 215 out of a possible 300, it seems wise to suggest as an added rule, that any candidate with an objective score 20 points or more above the county minimum for winners based on the objective portion alone, be declared a winner regardless of his essay score. Much research by the College Board and others shows that a single piece of writing yields a highly unreliable measure, primarily because it may constitute an unrepresentative specimen of an individual's typical performance. The added rule would mean that all candidates were being evaluated on total performance, objective and essay, rather than on either alone."

There is real possibility, however, that this weakness of the RSE highlights a more fundamental weakness of this, or any other single examination, for future use in the Regents program. Findley's analysis thus far rests on the assumption that the RSE will be used as a selection device under conditions of keen competition. This assumption has already been modified by the substantial increase in the number of Regents College Scholarships in the years since 1947. It has also been modified by the county-by-county competition, which has the effect of lowering the standard that would otherwise be maintained by the examination.

Further, the RSE is also used as a qualifying examination for the Scholar Incentive Program, which establishes a standard only a little above the ability and achievement necessary to graduate from high school. Findley's judgment reported above relates to the efficacy of the RSE for the identification of the intellectually able student; in that case, the judgment is generally favorable. A second question relates to the usefulness of the test for the group here called college capable; in this case, the judgment is more reserved. Findley develops this point as follows.

"The awarding of scholarship aid and the certification for remission of tuition of less outstanding, yet conscientious college students, on the basis of a procedure including examinations, is complicated by trends in demand for higher education and certain practices designed to distribute awards along lines deemed most equitable and in the public interest. It is fair to say that the Regents Scholarship Examination as now constructed and administered–including award procedures–represents an efficient and equitable adaptation to the selective admissions philosophy of access to higher education just at a time when a more inclusive philosophy is gaining acceptance. In recent years, we have turned from viewing elimination of weaker and less academically inclined students from high school as a process of 'natural' selection to viewing such 'dropouts' as a national social and economic problem. We are now in the process of turning from viewing exclusion of interested candidates from higher education by competitive selective procedures as 'natural'–even necessary and desirable–selection to viewing such restrictive effects as interfering with access to appropriate postsecondary education by students who will need this further education to equip them to play the parts they need to be able to play in future vocational, civic and family life, judged not simply by humanitarian concern for personal self-realization, but by the economic and political demands of our increasingly complex technological and social structure.

"The award procedure, by counties in proportion to high school graduates, has served well to adjust for gross differences in general academic stimulation among rural, urban and suburban settings. More recently it has helped adjust for the waves of less academically stimulated children of Spanish-speaking and rural backgrounds who have migrated into the urban centers of the state. This type of adjustment needs to be maintained [and] if anything carried farther to a point where advantaged children within counties are not favored over disadvantaged children from the same counties.

"Another issue, that of efficiency, involves comparing the built-in efficiency of the Regents Scholarship Examination within the Regents examination framework and the efficiency that might be obtained by using other external examination programs to accomplish some or all of the same purposes and thereby reduce the pressure of examination-taking on college-aspiring students.

"A third issue is the advisability of including data from local school sources, such as average grades, in determining scholarship awards. Statistical studies have consistently shown the slightly greater predictive power of the high school average over the best composites of test results at the end of high school in predicting college grade point average. The difference is generally not great, but it is uniformly true that a composite of tests and grades gives a substantially better prediction than either alone.

"Finally, there is the question of the basic validity of the Regents Scholarship Examination in assessing individual fitness for college work. We have grown accustomed to validity coefficients of .40-.60 for entrance tests or high school averages in predicting college grade point averages, and to multiple regression predictions of .50-.70 for composites of tests and high school averages. We shrug off the indeterminacy in these predictions, which leave 50 to 80% of the variance of college grade point averages unaccounted for, as due to noncognitive factors we are unable to measure, or which we even question taking into account as a form of dubious discrimination. There remains the possibility that our cognitive measures themselves are not the best and most relevant we could use to assess cognitive competence for advanced study."

In summary, the Findley report reaches essentially two conclusions. First, as a means of identifying the intellectually able students who should receive awards, the RSE is as good as and perhaps better than any other available test. Some improvement in selection could be made if the qualifying procedures for the essay section were modified. Some further improvement could probably be made if high school grades were added to the examination score for selection purposes, though this point requires further study. In general, however, Findley's judgment about the use of the test with intellectually able students was a favorable one.

Second, the Findley report echoes a concern that was expressed by Spence and reported in the preceding section of this report. This concern is over the question of whether the RSE or any other existing test is sufficiently comprehensive to provide measures of all the abilities found in the college-capable group today and required in the college-level programs they may take. The problem is whether the present examination places too much emphasis on intellectual ability and not enough on the less academic and more practical abilities required in the newer college courses.

Selection of Students to Receive Regents Scholarships. The staff of the present study decided to take a second and independent look at the selection procedures for the Regents College Scholarship Program. Findley concentrated on the Regents Scholarship Examination, and Kramer considered the selection procedures more generally.

Kramer concentrated on a weakness that was also identified in the Findley report: reliance on the Regents Scholarship Examination and exclusion of the secondary school record as a criterion for selection.

He points out that the present practice in the Regents Program is an exceptional one and that, in general, most selective admissions and scholarship competitions make use of both secondary school record and test scores in the identification of winners. Further, there is a vast amount of empirical evidence to support this general practice, much of which indicates that the secondary school record is superior to a test, if one had to choose between them. Kramer reports that New Jersey and Illinois have recently acted to include the secondary record in their state scholarship competitions, after having gained experience in using a test exclusively.

Kramer conducted a limited survey among eight secondary schools in New York City. He reports his results as follows.

"It was found that a number of students whose class rank placed them in the upper 10% of their graduating class, who were enrolled in the academic curriculum and took the Regents Scholarship Examination, failed to receive grades high enough on the test to qualify them for a Regents Scholarship.

"A capsule breakdown of these eight schools follows:

Type of secondary school	*Seniors (1966) in academic course*	*Number in graduating class*	*Number in upper tenth who took* RSE *but failed*	*Number in upper tenth*
A-1. Low college attendance . .	83	307	0	30
A-2. Low college attendance . .	159	493	28	49
B-1. Normal college attendance .	647	1179	37	118
B-2. Normal college attendance .	551	875	17	87
C-1. High college attendance . .	655	962	0	96
C-2. High college attendance . .	No report	1200	38	120
D-1. Special; disadvantaged student body	53	627	50	62
D-2. Special; disadvantaged student body	59	451	45	45
			215	607

"From this capsule it can be said that if the New York State Regents Scholarship Program had included, for selection purposes, secondary school performance in place of an examination, some 215 students from eight New York City high schools would have probably qualified for an award.

"We strongly recommend consideration be given to a careful study to determine whether or not able students are being eliminated because of the present selection criteria. We are not proposing the elimination of the present test. We urge the inclusion, if found warranted, of high school performance as an additional measure of ability to perform successfully in postsecondary school programs now available to the youth of New York State."

Regents Scholarship Stipends and Family Ability to Pay

Martin Meade, in his report for the present study, undertook a comprehensive review of the financial aspects of the various scholarship and fellowship programs and of the Scholar Incentive Program. His point of reference was the student and the various expenses of college attendance that faced him as he entered college. In the following discussion, attention is again focused on the Regents College Scholarship Program, although much of this discussion is relevant for the other scholarship and fellowship programs and for the Scholar Incentive Program. In preceding sections, discussion centers on how the Regents Scholars are selected; in this section, it centers on how the size of their awards is determined and how this determination relates to family ability to pay and to the total expenses of college attendance.

At present, the stipends in the Regents College Scholarship Program are limited to a maximum of $1,000, an amount that may be received by a student whose family has a net taxable income of $1,800 per year, or less. The stipend is reduced by $1 for each $10 of additional income above $1,800. The minimum stipend of $250 may be received by a student whose family has a net taxable income of $9,300 or greater. (The reference here is to net *taxable* income, a figure derived from New York State's income tax procedures. This figure is usually lower than net family income, the more common term.)

The amount of the stipend is also restricted by the cost of tuition and fees at the institution the student attends. The award may not exceed the cost of tuition and fees for the school year, or the amount of $350, whichever is greater. For example, a student from a family whose net taxable income is $8,300 per year may receive a stipend of $350, despite the fact that he may attend a tuition free institution.

Meade examined the distribution of family income of Regents Scholarship winners in the fall of 1965 and compared that distribution with the personal-income distribution for all families in the state, obtained from the 1960 census. An exact comparison is not possible with existing summaries for the Regents winners, because these summaries are affected at both extremes by the existence of minimum awards and by the effect of the tuition limitation. Nonetheless, Meade concluded that the Regents Scholarship winners are considerably more affluent than the state's general population. His statement on this point is as follows.

"It is apparent that the percentage of students in the lowest income group of Regents College Scholarship recipients is considerably lower than the percentage reported for the census. Specifically, in 1959, approximately 34 percent of families in the state of New York reported a net taxable income of $1,800 or less. Only 16 percent of the scholarship winners and 15 percent of the Scholarship Incentive Awards recipients were classified as having a net taxable income of $1,800 or less."

Meade also examined the current expenses of college attendance in New York. His estimates are based on figures from the 1965-66 academic year. He first considered tuition, fees, and supplies. He found that these ranged from an average of $112, at the four-year colleges associated with the tuition-free City University, to an average of $1,323, at the private colleges and universities. The highest figure for tuition, fees, and supplies was $2,650 at a private institution; the lowest was $48 at one of the City University's four-year colleges.

As observed earlier, tuition and fees constitute only a part of the total expenses facing a college student. Considering charges for room and board in the case of resident students, Meade found that the average charge at the State University was $861 and the average at the private institutions was $913.

Meade carried this analysis to the point of constructing an estimate of the total expenses of college attendance in New York, as seen from the student's point of view. His estimate is based on 1965-66 expense levels and distinguishes between commuter and resident students and also distinguishes among the several types of colleges and universities within the state. Meade's estimate for full-time undergraduate study is presented in Table 5, and his description of the way this estimate was constructed is as follows.

"An accurate estimate of the total expense of attending college is difficult to determine. However, according to *Business Week* the fixed expenses account for only 75 percent of the total expense of college attendance. According to *Business Week*, additional expenses incurred by a student include those for special course fees, clothing, personal spending, and transportation. For the student residing at college, *Business Week* estimates that these additional expenses can range between $500 and $800 annually. The College Scholarship Service of the College Entrance Examination Board indicates that, for the student residing at home, $400 to $600 should be allocated for home maintenance, $400 to $500 for personal expenses, and $100 to $200 for transportation. For purposes of this report, it is estimated that the average full-time college student who resides at home spends approximately $1,000 in addition to his fixed expenditures for tuition, fees, books, and supplies. For the student who resides at college, it is estimated that an average of $600 is expended for personal needs and transportation, in addition to the fixed expenses for tuition, fees, books and supplies, room and board."

The results presented in Table 5 suggest that the total expenses of college attendance in the state of New York, at a minimum, are slightly in excess of $1,100 per year. This is the situation at the four-year colleges of the free-tuition City University, where the student lives at home and commutes to college. The existence of tuition at the State University raises the figure to $1,478 at the community colleges and to $1,589 at the four-year colleges. Total expenses at the private institutions for commuters average $1,885 at the two-year colleges and $2,445 at the four-year colleges and universities. For students who reside at college, the foregoing figures are increased by approximately $500.

These figures can be compared with the stipends possible under the Regents College Scholarship Program. The maximum possible stipend is $1,000, and this amount may be given only to a student who attends a college whose tuition is at least equal to this amount. The effect of this requirement is to limit these awards to students attending the private colleges and universities where, as shown in Table 5, total expenses average $2,323 for commuters and $2,836 for residents.

Table 5. Estimated Total Expense of College Attendance for Full-Time Undergraduates in New York in 1965

Type of institution	*Commuter*	*Resident*
City University of New York		
Four-year colleges	$1,112	
Community colleges	1,205	
State University of New York		
Four-year colleges	1,589	$1,969
Agricultural and technical colleges	1,588	1,915
Community colleges	1,478	2,056
Contract colleges	1,804	2,430
Private		
Four-year colleges	2,445	2,968
Two-year colleges	1,885	2,336
Average: public	1,494	2,059
Average: private	2,323	2,836

On the other hand, the maximum possible stipend for a student attending the City University is $350, even though his family income may be in the very lowest category. In this case, his total expenses will range between $1,100 and $1,200.

Meade's estimate of total college expenses in New York permits the conclusion that stipends under the Regents College Scholarship Program account for only one-third to one-half of the expenses facing the student. This fact confronts the student with the necessity of finding additional funds from other sources, including family income and assets, loans, and employment. Another possible source is a supplementary scholarship award from the college he attends. It is reasonable for the state to assume that these other sources will be used to augment the Regents award, when they are open to the student and represent reasonable possibilities for him. However, for the boy or girl from low-income families, these sources are not always open and possible.

It is suggested here that there is a direct relationship between the size of the Regents awards and the tendency for low-income students to seek employment, rather than college, immediately after high school graduation. Of course many other factors also bear on this decision. The fact remains, however, that if the student is motivated for college and if he comes from a very low-income family, the total expense of college attendance represents a substantial expenditure that he may not be in a position to make.

At the other end of the scale, all the individuals associated with the present study reacted negatively to the present practice of paying minimum Regents awards of $250 per year to students who have not demonstrated financial need. It is now possible for a Regents College Scholar to receive $1,000 under the program, even though his family resources may be fully adequate to meet the total expenses of college attendance. This is a clear violation of the ability-to-pay principle and should be eliminated.

Summary Evaluation of the Regents College Scholarship Program. Most though not yet all of the students who can be identified as having high intellectual ability during the twelfth grade are now entering colleges and universities, and many are continuing into graduate and professional schools. This movement of large numbers of intellectually able students into college is a significant development of the past 10 years. The Regents College Scholarship Program has played a highly significant role in this development in the state of New York.

The immediate problem facing this program is one of assuring that the young people identified as Regents Scholars are, in fact, assisted to meet the full expenses of college attendance. The tuition limitation results in stipends that are materially less than the amount needed by low-income students, who do not have the options open to the middle- or high-income student to augment the Regents award from other sources. At the same time, there is a clear violation of the ability-to-pay principle in the practice of granting sizable minimum awards to students who have not demonstrated that they need such awards.

A more difficult and longer range problem pertains to the emphasis that should be placed on intellectual ability as a basis for making competitive awards to a limited number of students, under circumstances in which an increasing proportion of the age-group seeks to attend college. The present position of the Board of Regents is to define 10 percent of high school graduates throughout the state as intellectually able and to provide substantial scholarships for them. This position has the effect of adopting an even broader definition of intellectual ability, because of the effect of declinations by students who elect to attend college out of the state and because of the effect of the county-by-county competitions. In practice, the Regents Scholars span a broader range of intellectual ability, one that extends over perhaps 20 percent of high school graduates. This is a more liberal definition of intellectual ability than that used for most competitive scholarship programs and that required for admission to the most competitive colleges.

The reports by Spence, Findley, and Kramer suggest that this broad a definition of intellectual ability is difficult to maintain by means of a single examination, under circumstances in which 70 percent of high school graduates compete for Regents awards. To oversimplify, there is some risk of rewarding a second-rate physicist and overlooking a first-rate electrician. Any extension of the present program beyond the 10 percent level specified in the Regents' plans would only increase this risk.

There is a possibility that more comprehensive examining procedures can be developed that will assess the practical abilities required in the technical and subprofessional college courses. This development is urgently needed but is probably at least five years away. There is also the possibility of some improvement in the selection procedures for the Regents program through the addition of the secondary school record to the scores on the examination. This improvement, however, is likely to be marginal and probably not worth the added cost.

On balance, it is concluded that the present program is operating effectively in its identification of intellectually able students and that it can continue to operate effectively at a level of 10 percent of high school graduates, as specified in the Board of Regents' plans. It is also concluded that the present selection procedures would not support any substantial expansion beyond the 10 percent level.

College-capable Students and the Scholar Incentive Program

The Scholar Incentive Program represents a sharp contrast to the Regents College Scholarship Program just discussed. Scholar Incentive awards are not made on a competitive basis. They are, in general, available to residents of the state who are enrolled in a full-time undergraduate or graduate program at a college or university within the state. They are thus available to most students going to college. In the years since these awards were first established in 1961, the total amount disbursed annually under this program has reached $34 million, a sum that is slightly larger than the total disbursed on a competitive basis.

The amount of the Scholar Incentive award is based on the net taxable income of the student's family. It ranges from a minimum of $100 to a maximum of $500 per year, for undergraduates. The maximum award may be received by students whose families have a net taxable income of $1,800 or less. If the net taxable income is between $1,800 and $7,500, the award is $200. The minimum award of $100 may be received by students whose families have an income of $7,500 or more. The same principle holds for graduate study, although the awards are somewhat higher.

Scholar Incentive awards are limited to payment of tuition. Regardless of the demonstrated financial need of the student, an award will not be given unless the tuition is at least $200, and $200 is deducted from tuition in determining the upper limit of the award. An undergraduate at the State University, for example, where tuition is $400, will receive only $200 even if he demonstrates full financial need. He may, however, receive a second award of $200 from the State University Scholarship Fund. Scholar Incentive awards are limited to tuition even if they are given in combination with any Regents fellowship or scholarship award or any federal educational benefit.

Meade examined the income distribution for undergraduate Scholar Incentive award recipients in the fall of 1965. The results are presented in Table 6.

The data contained in Table 6 are based on administrative statistics from the New York State Department of Education and do not represent an actual distribution of family income. In effect, the income figure is inferred from the size of the Scholar Incentive award paid to the student. This inference is inaccurate at both extremes because of the existence of the tuition limitation and because of the existence of a minimum award, made without reference to the size of family income. The effect of this weakness in the statistics is to present an underestimate of the low-income families at the City University and at the community colleges associated with the State University and an overestimate of the high-income families. The figures for the State University four-year colleges and for the private institutions are, however, reasonably accurate.

Taking the foregoing qualification into account, Meade estimates that 22.6 percent of Scholar Incentive award recipients throughout the state reported a net taxable income of $1,800 or less. He contrasts this figure with the 34 percent of New York families who, in the 1960 census, reported incomes at this level.

Table 6. Percentage Distribution According to Net Taxable Income of Undergraduate Scholar Incentive Award Recipients, Fall 1965

Type of institution	*Percentage of all recipients*	*Percentage distribution by net taxable income*		
		$1,800 or less	*Between $1,800 and $7,500*	*$7,500 or more*
City University	2	14	40	46
State University				
Four-year colleges	28	18	48	34
Community colleges	11	16	42	42
Contract colleges	2	12	28	60
All public	43	17	45	38
All private	57	14	46	40
Total state	100	15	46	39

Note: Statistics at City University and community colleges are not reliable in the lowest and highest income groups. If the tuition is $300 or less, the student may request only the minimum award of $100, since he cannot receive more. All students requesting the minimum were classified as being in the maximum income group.

Meade also compared the size of the Scholar Incentive awards with his estimates of the total expenses of college attendance. The expense estimates for a full-time undergraduate program were given in Table 5. Meade's estimate of total expenses at the graduate level, also on a full-time basis, are presented in Table 7.

Table 7. Estimated Average Total Expense of College for Full-Time Graduate and Professional Students in New York

Type of institution	*Commuter*	*Resident*
City University of New York	$1,716	
State University of New York	1,774	$2,230
Average: Public	1,745	2,230
Average: Private	2,393	2,954

As already observed, undergraduate expenses range from a minimum of about $1,100 for commuters at the tuition-free City University to a maximum approaching $3,000 for resident students at a private college or university. Table 7 suggests that graduate expenses range from a minimum of about $1,700 for commuters at the City University to a maximum of about $3,000 for resident students at a private institution.

Scholar Incentive awards range from $100 to $500 for undergraduates; from $200 to $600 for first-year graduate students; and from $400 to $800 for advanced graduate students.

These awards account for only a small proportion of the total expenses facing the student. For all practical purposes, undergraduates attending the City University are ineligible for Scholar Incentive awards because no tuition is charged. At the State University, Scholar Incentive awards cover about 13 percent of total expenses. At a private college or university, the proportion would increase to 25 percent, but the remaining 75 percent represents a gap of $1,500 that would have to be filled from other sources.

In the aggregate, the Scholar Incentive awards represent an important source of indirect income to the private colleges and universities in New

York. The state makes payment to the student who in turn applies the payment to his tuition bill. This has been of public benefit because it has contributed to the utilization of facilities at the private institutions. As indicated earlier in this report, the educational diversity represented by these institutions has been and should be a significant though intangible resource for the state. The Scholar Incentive Program has helped maintain this diversity.

At the same time, it must be said that the "incentive" provided a low-income student is relatively small when measured against the total expenses of college attendance that he faces, even in the least expensive situation. As observed earlier the pattern of consumer expenditures for higher education has rested heavily on resources available to the middle- and high-income families: current income, family assets, and loans against future income. These resources are sharply limited or nonexistent in the case of low-income students and do not represent reasonable ways of responding to the incentive of a Scholar Incentive award. Loans and part-time employment are possibilities but should not be relied on too heavily. Other scholarship possibilities are not open to many of the young people in the group here called college capable. Here too, the financial practicalities do not explain an absence of motivation for college work. However, when motivation exists, the financial practicalities can become determining. It seems likely that many college-capable students, who have succeeded in graduating from high school in New York, have had to face these practicalities and have chosen not to enter college.

Nonstudents and Their Potential

The two preceding sections have concerned intellectually able students and college-capable students. These discussions account for practically all the students who now succeed in graduating from high school in the state of New York. There remains a group here called nonstudents, who do not now succeed in graduating from high school. The nonstudents in New York now number about 50,000 boys and girls or roughly one-fifth of the 18-year-old age group.

There is probably a significant number of boys and girls among the nonstudents who are potentially able, in an intellectual sense. These are students whose real ability is greater than their demonstrated ability, as measured by conventional tests or by school grades. Many are Negroes or members of other minority groups in the poverty population. Many are attending schools that are inadequate in the face of the deprivation that has surrounded them. They are less able intellectually at age 18 only in comparison with boys and girls from more favored backgrounds; if their records were interpreted in terms of the distance they have come, they would be judged to have high promise. Some of these boys and girls eventually graduate from high school; most do not. Relatively few will ever attend college.

Accurate estimates of the number of such students are nonexistent: there are too many "ifs" to make an accurate census of this talent. It is likely, however, that there may be as many as 5,000 such boys and girls among the senior high school population of New York—that is, grades 10, 11, and 12.

New York's present financial aid efforts begin at grade 12. It is not likely that these efforts will reach many in this group. It is not likely that *any* efforts in grade 12 will have a significant effect. It may be, however, that efforts beginning as late as grade 10 may reach a substantial proportion of the potentially able nonstudents. Such an effort is worth a trial in New York.

Institutional Considerations

The following discussion is turned from the student's perspective to that of the various colleges and universities in New York that offer the programs taken by the young people assisted by the state's financial aid activities. Information for this discussion is drawn from the reports prepared by George L. Dischinger Jr., Ernest L. Boyer, and Jerome E. Lord. These reports deal, respectively, with the perspective of the private colleges and universities, of the State University, and of the City University.

The Dischinger report points to the long and distinguished history of the private colleges and universities, beginning with the founding of King's College, now Columbia University, in 1754. Today, there are 150 private institutions in the state. "There are small colleges and very large and complex universities; there is a blend of the old and the newly established; there are colleges for men, colleges for women; there are programs in many areas of study. Although some of the colleges and universities are highly selective and competitive in terms of admission, others are much less so. Geographically, these institutions extend from New York City to the North Country to the Southern Tier to the Niagara Frontier. Taken as a group, the colleges are a cross section of American private education."

Dischinger estimates that "Between 50% and 55% of the (State) awards are being used at private colleges, and the total dollar volume going to students at private colleges is about $40 million." This figure amounts to roughly two-thirds of the state's present level of expenditures for all types of awards.

Reports on file at the New York State Education Department reveal that the private colleges and universities expended $35.8 million for student aid purposes in 1963-64 and $39.4 million in 1964-65. These expenditures were made from the colleges' own funds and represent scholarships, fellowships, and prizes, but not loans or jobs. These figures amount to 14 percent of gross tuition and fees at these institutions and include awards to out-of-state students.

The combination of the state awards and those of the private colleges and universities thus total between $75 million and $80 million at the current annual rate of expenditure. This is a substantial total but accounts for less than 20 percent of the total expenditures by students and their parents, in connection with attendance at the private institutions. The latter figure is estimated to be about $480 million per year, on the basis of Meade's average total expense at these institutions of approximately $2,600 and the 1965 private-college enrollment of 185,000 students.

The foregoing figures provide perspective for the following discussion. The state's financial aid efforts are important to the private institutions. They are, however, almost matched by the efforts the institutions themselves are making, and they are far more than matched by student and parent expenditures from family resources.

Dischinger reports that the principal effect of the present state program is to "spread" the colleges' own financial aid funds over a greater number of students. He suggests, further, that any substantial reduction in the state's activities could not be compensated for by the private colleges without seriously impairing their overall educational program.

The private institutions adhere to the ability-to-pay principle in their own financial aid programs; many are active in the College Scholarship Service. There is thus no serious incompatibility between the state's efforts and those of the colleges and no evidence that combinations of awards result in payments to individual students that are in excess of demonstrated financial need. There are, however, administrative complications that arise from the state's practice of making payments in separate checks for individual students and, more, in the practice of making payments one to two months after the colleges have begun their academic terms. This is a statutory problem and does not arise from inefficiency in the administration of the programs.

The private institutions are acutely aware of the financial pressures on low-income students and of the limited resources available to them to reduce these pressures. Dischinger reports that "There is a strong current of support running for a review of the income bases upon which awards are fixed and for an increase in the size of the maximum awards."

In general, then, the private institutions find the state's present overall program to be operating effectively and to be compatible with their own efforts in student financial aid. This judgment is tempered by the recognition that unmet needs exist among low-income students and that these needs cannot be met through resources available to the individual colleges and universities.

The State University of New York, founded in 1948, now consists of 57 campuses, and eight more are authorized and being developed. The Boyer report identifies three types of institutions within this complex: "(1) University-operated, of which there are four university centers, ten colleges of liberal arts and science, six agricultural and technical colleges, and four professional and specialized schools; (2) colleges operated by private institutions under contract with State University, of which there are four; and (3) University-supervised community colleges of which there are 29."

Boyer goes on to report that "The University's full-time enrollment in 1965 was 108,000; this is projected to be 120,000 in the fall of 1966, which represents nearly one-third of all full-time higher education enrollment in New York. Non-New York residents constitute four percent of the University's total full-time enrollment."

Most students at the State University now pay an annual tuition of $400 at the undergraduate level and $600 for graduate study. Tuition for out-of-state students is $600, and tuition for medical students is $800. Tuition at the community colleges is generally $300 but reaches $350 in some cases.

The tuition is offset for low-income students by the State University Scholarship Fund, established in 1963 when the present tuition levels were instituted. The legislation establishing this fund stipulates that no student from a family where a net taxable income is less than $1,800 will be required to pay any tuition. In 1965-66, some 8,000 students received awards totaling $1.6 million under the fund. This fund does not extend to include the students at community colleges or those at the contract colleges.

Boyer estimates that about 75 percent of the students at the State University receive awards under the state's present financial aid programs and that these awards constitute about 25 percent of the total expenses borne by the students and their families. His conclusion is that the state's awards "constitute both an essential element in the University's financial structure and an important aid to thousands of people who seek to support their sons and daughters in State University. Without this resource or something equivalent to it, the pace of State University's growth would probably be slowed substantially."

The foregoing judgment, however, is strongly qualified by three signs of weakness in the present program:

First, Boyer reports that "Student debt is increasing substantially, and a sizable number of high school graduates may choose not to attend college largely because of unwillingness to incur heavy debt." He estimates that one-third of all full-time students borrow under state or federal programs and that the average student loan at the State University is something in excess of $700. More important, the size of the average student loan is increasing year by year.

Second, the Regents' present program is less effective among students who attend the community colleges than among students in academic programs at four-year institutions. Yet, community college students tend to come from the lower-income groups in the general population. Exact figures on family incomes of students attending the different types of institutions of higher education in New York are not available. A recent study of the California State Scholarship Commission does provide evidence on this point for students attending colleges and universities in California. In that case, the family incomes of students attending the community colleges were the lowest among all types of institutions of higher education. It is reasonable to expect that there is the same situation in New York.

Students at community colleges are less likely to benefit from the present program for several reasons. The principal reason is the emphasis on intellectual ability in the Regents College Scholarship Program; this emphasis tends to concentrate these awards among the students who pursue an academic program at a four-year institution. The tuition limitation on the Scholar Incentive awards acts to limit the size of the award to a relatively small proportion of the total expenses facing the student. The absence of a competitive program for the community college graduates who transfer to a four-year college or university constitutes still another limitation. At the same time, it should be noted that some Regents scholars do attend community colleges and take their awards with them when they transfer.

The third sign of weakness identified by Boyer pertains to the real but covert competition among higher institutions for students of high intellectual ability. It has long been an accepted fact that the quality of a university's academic program is, in large part, determined by the caliber of its student body. The State University of New York, like all state universities, is expected to be an institution of high quality. Unlike many other similar institutions, New York's State University does not now have a comprehensive student financial aid program that will assist with the total expenses of college attendance for students of high intellectual ability who have demonstrated financial need. The present Regents College Scholarship Program, with its awards limited to tuition, is not an adequate substitute for the more comprehensive student financial aid programs currently in operation at other state universities such as the University of Michigan and the University of California. It is, of course, arguable that this weakness is a problem for the trustees of the State University and should not be dealt with by the Regents under their College Scholarship Program.

The Boyer report also refers to an administrative problem that was identified earlier by Dischinger: delays in the receipts of payments of state awards that extend well into the academic year or semester. This is a statutory problem and does not arise from administrative inefficiency.

The City University of New York now includes 13 operating units: 5 four-year senior colleges, 1 three-year senior college (including one graduate year), 6 community colleges, and a graduate center. Total enrollments in 1965 were almost 140,000, of which 56,000 were full-time students. The corresponding figures for 1966 are 143,000 and 60,000. Enrollments are expected to reach 150,000 students in 1967.

The City University's policy with respect to free tuition is well known. It extends to city residents matriculated in a degree program at either the four-year colleges or the community colleges, although these students pay a fee that ranges between $50 and $100 per year for noninstructional services. Nonmatriculated undergraduates pay tuition of $18 per credit hour at the senior colleges and $15 at the community colleges. Most graduate students pay tuition of $25 per credit hour.

About 20 percent of the Regents College Scholarship awards each year are made to students at the City University. The interaction between the tuition limitation on state awards and the free-tuition policy of the university results in a range of stipends from $250 to $350. Unlike the situation on other campuses, these awards can be used by City University students to meet the expenses of college attendance other than tuition.

The Regents awards at City University thus constitute a significant exception to the principle of limiting awards to the payment of tuition.

Only about 2 percent of Scholar Incentive awards are made to students at the City University. Most students receiving these awards are nonresidents of New York City who pay tuition of $400 at the senior colleges.

The urban problems facing the City of New York and its university defy a brief summary. Lord's report gives a few highlights:

"New York City has a population slightly in excess of 8,000,000. Next to the white population, the largest segment of the population is Negro, numbering approximately 1,000,000, and Puerto Rican, numbering over a half-million. The City now has fourteen target areas designated by the Economic Opportunity Committee in its war against poverty; a new list of twenty-four target areas is awaiting approval. Logue's report on housing, planning and development in New York City, *Let There Be Commitment,* points out that the slums are growing, and estimates of the size of the City's poverty population center on 1,000,000. In 1960, the median schooling for adults 25 years and older was 10.1 years."

Lord's report goes on to indicate that in 1966 more than 70,000 students graduated from the public and parochial high schools of New York City. Approximately 56 percent of them entered college, but the rate for public high school graduates is much lower than this figure would suggest. Indeed, the number of vocational school graduates going on to some form of higher education is extremely small, and even the public academic high school graduates, who constitute about two-thirds of the total numbers, show only a 49 percent college applicant group.

Furthermore, the number of Negro and Puerto Rican youngsters who enter college—their ranks already more decimated by high school dropouts than the white group—is extremely low. In citing from a report based on estimates of color composition of graduates from New York City high schools and number entering college, Lord indicates that although in 1965 approximately 63 percent of white high school graduates were going on to college, only 16 percent of the Puerto Rican graduates and fewer than 20 percent of the Negro graduates would be with them. The disparity seems clear.

City University is currently operating three interesting and worthwhile financial aid programs designed to identify and encourage able students from the poverty areas. Lord describes this work as follows:

"With money previously appropriated and money authorized by the recent legislation, the University is running three programs designed to account in part for the levels of student ability and motivation and ability to pay. They are called College Discovery I, College Discovery II, and SEEK. All three are designed to locate, identify, counsel, teach and give some financial support to about 3,350 students. College Discovery I and SEEK are providing special help to students during the summer before college and during their high school years. All three programs are designed for students whose ability may be hidden by social/economic deprivation.

"These programs have been quite successful in helping students from disadvantaged populations reach and stay in college. It is well-nigh impossible to tell how much of a dent they have made, because no one can tell how many students there are in high school who could go on to a successful college career."

Lord's report makes clear that there is a great disparity between the financial needs of students at the City University, both present and potential, and the resources available to the university to assist in meeting these needs. He describes the intention of the Board of Higher Education to "offer the benefits of post-high school education to all residents of New York City who are able and eager to avail themselves of these benefits." But he suggests that this goal can be reached only if there is substantial increase in the state's financial aid activities.

All three institutional consultants to the present study would doubtless agree to the following: (1) financial inability to meet the total costs of college attendance constitutes a significant reason for the failure of many college-capable and some intellectually able students to attend college; (2) this problem is being partially but by no means completely solved by the state's present financial aid programs; (3) resources available to the individual colleges and universities are limited and cannot conceivably be stretched to deal adequately with the problem; and (4) substantial action at the state level is needed if the momentum already gained toward broad opportunities for higher education is to be sustained.

Relationship between State and Federal Aid Programs

The federal government has become increasingly active in the field of student financial aid in recent years. The review for this study of the programs now operating in New York State thus had to take account of this development. Charles C. Cole Jr. prepared a report for the study on the relationship between the state and federal programs. The following discussion draws heavily on his report.

Cole reports that 25,000 graduate students are being supported on fellowships financed by federal funds; that approximately 458,000 students are currently borrowing under the National Defense Student Loan Program; and that more than 100,00 college students from low-income families are on federally supported work-study grants. The federal government's annual expenditures for these activities are approximately $400 million at the undergraduate level (exclusive of veterans' educational benefits) and $240 million at the graduate level. The level of these expenditures can be contrasted with the total of expenditures by students attending colleges and universities throughout the country this year. Cole estimates this figure to be $6 billion.

The figures in the foregoing paragraph are national figures. The estimate of current annual expenditures by the federal government in New York State for student financial aid is $30 million at the undergraduate level and an equal amount at the graduate level.

Cole's report contains a detailed description of the various federal programs and an approximate accounting of the extent to which the major programs are affecting college students in the state of New York. This information is too detailed to be included here, but his general description of the characteristics of federal student financial aid programs is of interest and relevance. The following quotations are taken from this section of his report.

"Federal funds for student aid are allocated for specific, immediate ends and for solving important, clearly demonstrated manpower needs. Federal funds are concentrated in the sciences, particularly at the graduate level. However, there has been a broadening of the areas of federal concern during the last ten years. There appears to be an implied philosophy that graduate education should be free or almost free. A philosophy of aid at the undergraduate level is more difficult to ascertain. The preference of many for loans over scholarships, at the undergraduate level, the fact that Congress authorized a loan program in 1958 and a smaller grant program in 1965 would lead one to conclude that federal policy favors support of undergraduate education by those who would receive it.

"However, to speak of a rationale for federally supported student financial aid programs is somewhat misleading. There appears to be no single comprehensive policy. In the past, apparently, there has been little coordination among the various programs and little cooperation among the separate agencies. Indeed, according to some observers, there appears to be considerable competition among some of the federal agencies in their student aid operations. The likelihood of such competition is another reason why there should be efforts to enhance cooperation and coordination among the federal agencies administering student aid programs. The Johnson Administration has taken cognizance of this fact for in 1964 the President issued an executive order designed to improve coordination of federal programs and policies related to education."

"To the extent that there is a single rationale that has operated over the years, one might say that until 1965 the philosophy of federal student aid was that graduate education, especially in fields of study considered in the national interest, should be relatively free to the individual while undergraduate education should be paid for, initially or ultimately, by those who receive it. Since 1965 a second ingredient in the rationale of federal student aid has been the elimination of poverty. Federal student aid at all educational levels is now viewed as justifiable if its expenditure will aid the disadvantaged and enhance equality of opportunity. This approach rests on the assumption or conviction that education and training offer the most effective means for helping poor people rise on the economic ladder. The preamble of the Economic Opportunity Act passed in 1964 states this policy in straightforward terms: 'It is, therefore, the policy of the United States to eliminate the paradox of poverty in the midst of plenty in this Nation by opening to everyone the opportunity for education and training, the opportunity to work, and the opportunity to live in decency and dignity.' "

In considering possible changes in the direction and level of federal expenditures for student financial aid during the next five years, Cole advances the following predictions: (1) Allocations for existing programs will probably increase, perhaps at an average annual rate of 5 percent. (2) There is likely to be an increase in graduate fellowships in such fields as space science, metallurgy, bioengineering, nursing, and social work. (3) Fellowship support in the humanities is likely to be undertaken but at a relatively lower level of allocation. (4) The new G.I. Bill for veterans of the armed services will probably contribute just as dramatically to the expansion of graduate education as the World War II G.I. Bill contributed to an increase in undergraduate enrollments. (5) Loans will continue to constitute the major federal effort at the undergraduate level, although there is doubt whether they will be administered under the National Defense Student Loan Program or on a guarantee-insurance basis. (6) Federal expenditures for student financial aid will probably equal or exceed $1 billion by 1972.

The federal activities in the field of student financial aid have at least three significant implications for New York's present program and any changes that might be contemplated in it.

First, the nature and level of federal activity at the graduate level is such that the state's efforts at this level should be considered supplemental to those of the federal government. The state's efforts should be directed toward providing fellowships in those fields not adequately covered by federal awards yet deemed to be in the public interest within the state of New York. The staff for this study has not canvassed this situation in detail and can offer no judgments at the present time.

Second, the federal emphasis on loans at the undergraduate level leaves to the state the initiative with respect to scholarship grants at this level. There is little or no likelihood that federal programs as comprehensive as the Regents College Scholarship Program and the Scholar Incentive Program will come into being in the near future. To the extent that loans represent an unrealistic resource for students to use in meeting the total expenses of college attendance, and to the extent that family income and assets are inadequate, the state would appear to be the level of government that should respond.

Third, the current federal emphasis on the war on poverty offers an opportunity for cooperative actions by the state, its colleges and universities, and the federal government. Action in the form of a scholarship program directed toward the poverty population would receive financial assistance from the federal government, if it met federal specifications.

Conclusions and Recommendations

The door to educational opportunity beyond high school in the state of New York is now about half open. The advances that have occurred since the early decades of the twentieth century are partly the result of public investment in elementary and secondary schools. They are also partly the result of public investment in the colleges and universities. These advances are, to a considerable degree, also the result of substantial investments by the families of students who have gone to college and by the students themselves. The present pattern of consumer expenditures for higher education rests heavily on resources available to the student and his family and less on institutional resources, both public and private. This pattern of expenditures has sustained a mass movement toward higher education on the part of middle-income families and, to a small degree, on the part of lower-income families.

It is not likely that the present pattern of consumer expenditures can sustain a continuation of this momentum into the lower-income strata of American society. The resources available to these families are at least partially and often totally inadequate to meet the total expenses of college attendance. College expenses now range from $1,000 to $3,000 per year and can be expected to increase in the years ahead.

The advances in educational opportunity at the college level are also the result of a pragmatic definition of "college capability," one that has become increasingly broad in response to manpower demands from a technological economy and human demands from an advancing society. The college-capable student of today may be intellectually able, but more commonly he is not. A boy or girl designated as capable of doing college work is now defined in educational terms simply as one who has graduated from high school. Whether he goes to college is increasingly a social or economic question, not an educational one.

In their *Statewide Plan for the Expansion and Development of Higher Education, 1964*, the Regents stated their first goal as follows: "Equal and open educational opportunity beyond high school for each qualified person who desires such education, the opportunity to be unrestricted by race, creed, or national origin, and to be available until each person's needs for economic and social self-sufficiency are met."[21]

The Regents student financial aid activities will be an important instrument of public policy in the achievement of this goal, provided they are expanded to reflect the total expenses of college attendance, in relation to ability to pay, for all students capable of undertaking education at the college level. Accordingly, the following recommendations are here submitted:

Recommendation 1. The Board of Regents should adopt as a long-term objective the provision of direct financial assistance toward the total expenses of college attendance for all New York residents attending New York's colleges and universities, such assistance to be provided in strict accordance with the financial ability of the student and his family to meet these expenses.

Recommendation 2. The foregoing objective should be met primarily by means of a substantial expansion of the Scholar Incentive Program. The following principles should be used as a guide in adapting this Program to the objective.

a. A student will be eligible if he is a resident of the state and enrolled in a two-year college, four-year college or university, graduate or professional school, or specialized institution within the state of New York that is recognized by the New York State Education Department. Eligibility will extend to full-time students. Extension of eligibility to part-time students should be determined by a further study of the needs within this group.

b. The maximum Scholar Incentive award will be limited to the total of all reasonable expenses of college attendance. These expenses include tuition, housing, food, transportation, books, and supplies. In addition, an allowance for foregone earnings will be considered a reasonable expense when the student's attendance at college would result in an undue financial hardship for his family.

c. Scholar Incentive awards in the individual case will be determined by reducing the maximum figure to reflect ability to pay the total expenses of college attendance. Two allowances will be involved in this reduction: (i) an allowance representing the student's contribution toward his own college expenses through summer or term-time employment and through loans; and (ii) an allowance representing the family's contribution from its resources. The allowances will, in some cases, be larger than the total expenses of college attendance. In that event, no Scholar Incentive award will be given.

d. Scholar Incentive awards will be considered supplemental to any awards by agencies of the federal government. The combination of state and federal awards should not exceed the total expenses of college attendance.

The emphasis in the foregoing long-term recommendations is placed on a substantial expansion of the Scholar Incentive Program, one that will, when completed, provide fully for the college expenses of New York residents at New York colleges, in relation to their financial ability. It is concluded that the state's major future effort should take this form rather than a series of competitive scholarship and fellowship programs. The latter approach is more appropriate for the past era of scarcity of opportunity in higher education than it is for the era of abundant opportunity that lies just ahead.

The transformation of New York's present series of financial aid programs into the program called for by Recommendation 2 cannot be completed within a brief period. The cost to the state will have to be assessed in terms of other requirements for public expenditures, within higher education and elsewhere. Such an assessment has not been part of the present study. The implementation of this recommendation will require operations planning and detailed study of possible procedures. These also have not been part of the present study. Further, expansion of the Scholar Incentive Program will need to be scheduled in stages and corresponding adjustments made in the competitive scholarship and fellowship programs during a transition period. The planning initiated by the present study will need to be continued between now and 1970, and it should thus be possible to implement Recommendation 2 partially by 1970 and fully by 1975. Therefore:

Recommendation 3. It is recommended that the planning initiated by the present study be continued by the Commissioner of Education and his staff between now and 1970, looking to the partial implementation of

Recommendation 2 by 1970 and its full implementation by 1975. This planning should be undertaken with the assistance of a strong advisory committee.

The continued planning called for in Recommendation 3 should be done taking into consideration the relationship between the Scholar Incentive Program, on the one hand, and the various scholarship and fellowship programs, on the other hand, during the period of transition. The general principle to be followed is one of increasing maximum awards under the Scholar Incentive Program and maintaining the present level of maximum awards under the scholarship and fellowship programs, until the combination of maximum awards for the Scholar Incentive Program and any other program is equal to the total expenses of college attendance. After that point, the maximum award under the competitive program would be reduced, as the maximum under the Scholar Incentive Program is further increased. Then, as the level of maximum award under the Scholar Incentive Program reaches the total expenses of college attendance, as is intended by Recommendation 2, the need for the continued operation of the competitive program would disappear. The competitive programs will thus be an essential part of the overall effort during the period of transition, but as the Scholar Incentive Program carries an increasing share of the total burden, their relative importance will diminish.

This planning will also require study of procedures for estimating financial ability to meet the expenses of college attendance on the part of New York students and their families. The elements to be considered in making this estimate, as given in Recommendations 2b and 2c, call for a more sophisticated procedure than is now in use. It is believed that their use will result in a fairer, more equitable procedure. These elements will require explicit definition that will vary from year to year. It will be necessary to obtain estimates of the total expenses of college attendance from the colleges and universities and to provide for their review by the New York State Education Department. Standards for the allowances representing the contributions from the student and his family will need to be established and reviewed periodically. The general experience of the College Scholarship Service should be considered in establishing these standards, particularly with respect to contributions from family income and assets and with respect to the consideration given family expenses for the education of other children in the family. The College Scholarship Service's general experience, however, should be adapted critically to the New York situation and not necessarily applied on a wholesale basis. It is expected that a strong advisory committee will play a key role in effecting this adaptation.

The need for study of the financial requirements of part-time students has already been noted. This study should be undertaken as part of the planning operation.

Recommendations 1, 2, and 3 are for the long term. The following additional recommendations are submitted for the period between now and 1970. They will begin the process of change toward the objective called for in Recommendation 1. More important, they will begin to meet problems and needs that are now clearly visible and that have been identified in earlier sections of this report.

Immediate need exists for special action directed toward the group identified as nonstudents in this report: the young people who now drop out of school before high school graduation. The judgment has been expressed that many in this group possess latent intellectual potential. It is not likely, however, that New York's present student financial aid efforts will reach many in this group, because their principal focus is at grade 12, and at this point the pattern of nonachievement is already well established.

The problem facing the state in connection with this group is to provide the education, the support, and the motivation that will enable them to finish high school successfully and continue their intellectual development at college. The educational part of such an effort, of course, is paramount. However, a supplementary financial aid program might offer the tangible support needed to stimulate motivation for continued education, through high school and beyond.

The financial aid program for these students should seek to identify them as potentially able at the end of grade 9, using a combination of junior high school grades, teachers' recommendations, and tests of both ability and achievement.

The students identified under this program would be recognized by the state and by their schools; they could be designated as Regents Opportunity Scholars. Their families would receive annual stipends of $500, depending on financial need, to be used for the student's maintenance during the period of high school study. The student's entire record could be evaluated in the twelfth grade and, if his progress was satisfactory, he would be assured of continued support throughout his college career at a level consistent with the Regents College Scholarship Program.

The Regents Opportunity Scholarship Program outlined above would operate only in poverty-area schools, where the present rates of high school graduation and college attendance are below overall state averages. A prerequisite for such a program would be an extended educational effort in these same schools. The success of the educational effort and the supplementary financial aid program would be judged in terms of their combined effect on the rates of high school graduation and college attendance.

The following recommendation is submitted in order to provide for such a program:

Recommendation 4. A program of Regents Opportunity Scholarships should be established in the high schools serving designated poverty areas. The program should identify and support a total of 5,000 boys and girls in grades 10, 11, and 12. The identification of students should occur at the end of grade 9, using both subjective and objective procedures. Annual stipends of $500 should be awarded the families of these students beginning in grade 10 and continuing through high school, assuming satisfactory progress by the student. The stipends should be continued during the college years at a level consistent with those under the Regents College Scholarship Program, again assuming satisfactory progress. The entire program should be constituted as a cooperative effort of the high schools, the colleges and universities, the federal government, and the Board of Regents.

The foregoing recommendation is designed to meet an urgent need among a special group of students, one that cannot await implementation of the long-term proposals made earlier. At the same time, pressing financial needs exist currently among students now attending college in New York. The following recommendations are directed toward the existing student financial aid programs and are designed to be the initial steps in the long-term transition proposed earlier.

Recommendation 5. With respect to the Scholar Incentive Program, the following recommendations are submitted.

a. The maximum award should be increased to $1,000 for undergraduate and graduate students.

b. The present limitation to tuition should be removed, and the awards should be made applicable to the total expenses of college attendance on a commuting basis.

c. The awards in the individual case should reflect ability to pay college expenses. This should be accomplished by reducing the maximum amount by means of allowances that would represent contributions from the student and his family. No Scholar Incentive award should be made when the allowances exceed the total expenses of college attendance on a commuting basis.

d. Scholar Incentive awards should be considered supplemental to any awards by agencies of the federal government. The combination of state and federal awards should not exceed the total expenses of college attendance.

The intent of Recommendation 5 is to establish the Scholar Incentive Program as New York's basic student financial aid program and to take the initial step in the expansion of this program that was proposed earlier. The proposed maximum award of $1,000 is well below the total expense of college attendance for many of the state's college students. It is, however, close to Meade's estimate of expenses for commuting students at the City University. The proposed figure is, in fact, a minimum figure and should be further increased as soon as possible, in accordance with the planning proposed in Recommendation 3.

The reference to college expenses on a commuting basis in Recommendation 5 is also a compromise with present needs. This amount is somewhat less than actual expenses for students who are in residence at college and represents an initial, stringent definition of the total expenses of college attendance, one that should be extended as the period of transition proceeds. The intent of this reference is to limit the awards for individual students to an amount that would maintain them as commuting students at the college or university they attend. Resident students would, of course, receive awards, but within a limitation established by the expense level of students who commute to the institution they attend. Under a $1,000 maximum award, this point has no relevance when only the Scholar Incentive Program is considered, because commuting expenses exceed this figure at New York colleges. The reference becomes relevant when a student receives a Scholar Incentive award in combination with an award from one of the competitive programs.

The competitive scholarship and fellowship programs will be an essential part of the state's overall effort during the period of transition proposed. The following recommendations are designed to strengthen these programs during this period and to take the initial step in utilizing these programs to meet the long-term objective proposed in Recommendation 1.

Recommendation 6. With respect to the Regents College Scholarship Program, the following recommendations are submitted.

a. The number of new awards each year should be established at 10 percent of the total number of high school graduates in the state, as proposed by the Board of Regents in their statewide plan.

b. The limitation to tuition should be removed and the awards should be made applicable to the total expenses of college attendance on a commuting basis.

c. The maximum award should be maintained at its present level.

d. The awards in the individual case should reflect ability to pay college expenses. This should be accomplished by reducing the maximum amount by means of allowances that would represent contributions from the student and his family. No monetary award should be made when these allowances exceed the total expenses of college attendance on a commuting basis.

e. A category of Honorary Regents College Scholarships should be established without monetary award for students whose ability to pay exceeds the total expense of college attendance on a commuting basis. Students in this category should be given all due recognition and should be assured that, if their financial circumstances change adversely during their college careers, they will become automatically eligible for a monetary award.

f. The selection procedures should be modified to limit further the circumstances under which the essay section of the Regents Scholarship Examination can eliminate a candidate who is otherwise well qualified on the objective section of the examination.

g. Regents College Scholarship awards should be considered supplemental to Scholar Incentive awards. The combination of the two awards should not exceed the total expenses of college attendance on a commuting basis.

h. Regents College Scholarship awards should be considered supplemental to any awards by agencies of the federal government. The combination of state and federal awards should not exceed the total expenses of college attendance.

i. Awards by New York's colleges and universities should be considered supplemental to Regents College Scholarship awards, in the expectation that the combination of awards will not exceed the total expenses of college attendance.

Recommendation 6 is designed to meet immediate needs within the state until successive increases in the maximum awards under the Scholar Incentive Program can begin to approach the total expenses of college attendance for all students. The Regents College Scholarship Program now reaches a significant number of intellectually able students within the state. The proportion reached, however, will be reduced in the face of increases in the 18-year age group as long as only a fixed number of new awards is possible. The proposal to establish the number of new awards at a 10 percent level has been under consideration within the Board of Regents. A change to this requirement at the present time would assure that the same proportion of secondary school graduates would be assisted in the immediate future as has been assisted in the recent past.

The removal of the tuition limitation is designed to recognize the large gap that now exists between the present limitation and the total expenses of college attendance facing the able students now identified as Regents College Scholars. The expectation is that the combination of Regents and Scholar Incentive awards for these able students will move considerably closer to total expenses than is currently the case. As explained earlier, the reference to expenses on a commuting basis is designed to adopt an initial, stringent definition of total college expenses during the beginning of a period of transition.

The proposal to maintain the maximum award under the Regents College Scholarship Program at its present level is, in the minds of those associated with this study, a matter of priority. Greater priority would be attached to Recommendation 4, which proposes a new program of Regents Opportunity Scholarships, and to Recommendation 5, which proposes an immediate expansion of the Scholar Incentive Program. If financial circumstances within the state are such that Recommendations 4, 5, and 6 cannot all be implemented immediately, then it is a contingent recommendation that the maximum award under the Regents College Scholarship Program be reduced at the time the maximum award under the Scholar Incentive Program is increased, so that the combination of the two awards remains at or above the present level.

The assumption underlying Recommendation 6f, which deals with selection procedures, is that the Regents College Scholarship Program will not in the foreseeable future be asked to identify substantially more than 10 percent of high school graduates within the state. At that level, the present selection procedures are judged to be satisfactory, with the modification proposed in Recommendation 6f. A marked expansion of the Regents College Scholarship Program, say to a level of 20 percent of high school graduates or more, would require major changes in the selection procedures. In that event, further attention would need to be given to the Regents Scholarship Examination and to additional selection criteria, as discussed earlier in this report.

Recommendation 7. With respect to the remaining competitive scholarship and fellowship programs, the following recommendations are submitted:

a. Responsibility for the program of Regents Scholarships in Cornell University should be transferred to the university from the New York State Education Department.

b. The remaining competitive programs should be reviewed during the planning proposed in Recommendation 3, and the specifications for these programs should be adjusted in coordination with the recommendations that pertain to the Scholar Incentive Program. The Lehman Fellowships constitute an exception to this recommendation because of the unique character of this program.

Two other matters that were discussed in earlier sections of this report but are not the subject of specific recommendation require comment here. The question of a program of transfer scholarships for students moving from two-year colleges to four-year institutions has been considered in other studies and was a consideration in the present one. It is concluded that the recommendations made in this report will benefit this group of students, as they will others, and that a new competitive program for this group is not required if these recommendations are implemented. Recommendation 5, in particular, calls for an immediate increase in the maximum award under the Scholar Incentive Program and for the application of this award to expenses of college attendance other than tuition. This change would be of direct and immediate benefit to students at the community colleges, among others. If this change is not made, then the question of a program for transfer students should be reexamined.

Second, the issue of permitting New York's scholarship and fellowship holders to apply their awards to study outside the state was also reviewed and is discussed in an earlier section of this report. Consideration was given to the availability of college facilities within the state, to the desirability of permitting freedom of choice on the part of the individual student, and to the public interest in promoting student mobility among states as a means of reducing provincialism. On the other hand, it was felt that other needs exist within the state that are not being met under the current financial aid programs and that these needs deserve priority over the use of state funds to support attendance at out-of-state colleges and universities. These other needs are the subject of the recommendations in this report.

* * *

The student financial aid programs that are already in operation in the state of New York require annual expenditures of public funds on the order of $65 million to $70 million. If the present programs continue unchanged, enrollment increases alone will prompt marked increases in expenditures between now and 1975. The changes contemplated by the recommendations in this report will add substantially to these increases. These changes will also, however, add materially and intangibly to New York's human resources.

Increase in future cost will be partially offset by savings that will occur if the minimum awards are eliminated that now go to students who have the financial ability to meet college expenses. These savings are estimated to be on the order of $6.5 million at the present level of activity and as much as $10 million at the enrollment level expected in 1975. Substantial as these savings are, the effect of implementing the recommendations in the present study will be to increase annual expenditures to a level that will probably exceed $125 million by 1975.

This is an investment in the future and in the coming generation. It should pay rich dividends to the people of the state of New York.

Notes and References

1. Committee for Economic Development, *Raising Low Incomes through Improved Education.* New York: Committee for Economic Development, 1965, 51 pp. See pp. 20-21.

2. Richard Pearson, chapter beginning p. 144, in Earl J. McGrath, ed., *Universal Higher Education.* New York: McGraw-Hill Book Co., 258 pp. The data supporting this conclusion are derived from John C. Flanagan and others, *Project Talent: The American High School Student.* Pittsburgh, Pa.: University of Pittsburgh Press, 1964, Table 11-5.

3. Leland L. Medsker and James W. Trent, *The Influence of Different Types of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels.* Berkeley, Calif.: Center for the Study of Higher Education, University of California, Berkeley, 1965, Table 16, p. 28.

4. *Ibid.*, p. 99.

5. U. S. Office of Education, *Equality of Educational Opportunity.* Washington, D. C.: U. S. Office of Education, 1966, 33 pp. See p. 24.

6. *Ibid.*, p. 20.

7. Edmund A. Gordon and Doxey A. Wilkerson, *Compensatory Education for the Disadvantaged.* New York: College Entrance Examination Board, 1966, 299 pp. See pp. 31-32.

8. *Ibid.*, p. 159.

9. *Ibid.*, p. 184.

10. *Ibid.*, pp. 19-20.

11. U. S. Bureau of the Census, *Historical Statistics of the United States, Colonial Times to 1957.* Washington, D. C.: U. S. Bureau of the Census, 1960, 789 pp. See Series H339, H341, H344. The corresponding figures for 1960 are given in *Continuation to 1962.* Washington, D. C.: 1965, 154 pp.

12. *Historical Statistics of the United States, op. cit.*, Series G216.

13. College Entrance Examination Board, *Financing a College Education: A Guide for Counselors.* New York: College Entrance Examination Board, 1966, 23 pp. Derived from Table 1, p. 13, in which figures for families that have one, three, and five children are also given.

14. The percentages of families in the United States receiving income of different amounts were derived from U. S. Bureau of the Census, *Statistical Abstract of the United States.* Washington, D. C.: U. S. Bureau of the Census, 1965, Table 468, p. 341. The figures are for 1963.

15. Elizabeth W. Haven and Robert E. Smith, *Financial Aid to College Students, 1963-64: Survey of Financial Aid Administered by Colleges and Universities to Full-Time Undergraduates, Part I.* College Entrance Examination Board Research and Development Reports, RDR-64-5, No. 11. Princeton, N. J.: Educational Testing Service, 1965, 62 pp. See p. 6.

16. Coordinating Council for Higher Education, *An Evaluation of the Tuition Free Principle in California Public Higher Education.* Sacramento and San Francisco: Coordinating Council for Higher Education, 1965, p. 21. Schultz' procedure for estimating foregone earnings is summarized in Appendix A of this report. The basic reference for this work is Theodore W. Schultz, *Education and Economic Growth*, in Nelson B. Henry, ed., *National Society for the Study of Education. 60th Yearbook. Part 2: Social Forces Influencing American Education.* Distributed by University of Chicago Press, 1961, 252 pp.

17. Sherman N. Tinkelman, Assistant Commissioner for Examinations and Scholarships in the New York State Education Department, disagrees with Lindley's explanation of the introduction of the Regents Scholarship Examination. In a memorandum written on January 12, 1966, Tinkelman states: "I believe that the record will show that the change to the scholarship examination was proposed and accepted largely on the basis of the inequity of comparing student scores in different subjects on examinations taken in different years, and the lack of discrimination in Regents scores for high ability students." Tinkelman's specific reasons are undoubtedly accurate, but Findley writes from a more general perspective and reflects the pervasive influence on testing during the late 1930s of the *Eight Year Study*, which demonstrated that the traditional college preparatory sequence was unnecessarily restrictive when evaluated against subsequent student performance in college.

18. The entries in Table 4 are derived from New York State Education Department, *Handbook on Examinations and Scholarships.* Albany, N. Y.: New York State Education Department, 1966, 83 pp.

19. State University of New York, *The Master Plan 1960.* Albany, N. Y.: State University of New York, 1961, 72 pp. See p. 19.

20. Committee on Higher Education, *Meeting the Increasing Demand for Higher Education in New York State.* A Report to the Governor and the Board of Regents. Albany, N. Y.: New York State Education Department, 1960, 74 pp. See pp. 54-55.

21. New York State Education Department, *The Regents Statewide Plan for the Expansion and Development of Higher Education, 1964.* Albany, N. Y.: New York State Education Department, 1965, p. 28.